



KEY NOTE



Sec: E. (Geo) Longden. G3ZQS. 119 Cemetery Rd., DARWEN, Lancs. BB3 2LZ. England. 0254 703948

Slow Traffic Net: Tuesday & Thursday 9pm EDT on 3.682

Century Award Net: Sunday 2000Z on 14.058MHz

Please keep watch on the Novice Bands and frequencies ending in .x58 (.058, .158, .258 etc)

Slow Ragchewing Group: W8BI 8pm EDT Wed on 3.720

Saturday QSO Groups: 14.058 at 2000Z and 7.058 at 2300Z

North American Memo

Nancy Kott WZ8C
Post Office Box 47
Hadley MA 48440

810-797-5388
Email: nancy@tir.com
<http://ngnvv.qrp.com/~fists>



WZ8C reserves the right to edit submissions for space, clarity and topic suitability. Comments not attributed to another are written by WZ8C. Articles from The Keynote may be reprinted if credit is given to the original author.

Our TENTH anniversary of the Founding of FISTS by Geo G3ZQS is this September. The DX Straight Key Week will be taking place the first week of September, as it always does. While it is a popular event, not everyone enjoys using a straight key. I would like to see something in which all FISTS can participate. We should do something special. A Special Event Weekend would be fun and something everyone can do.

Starting September 9 thru Sept 12, your shack can become a FISTS Special Event Station by calling (or answering) CQ FISTS SE. Every station you work will be eligible to receive a Special Anniversary Special Event Certificate for helping us celebrate.

The stations you work will QSL with an SASE to your QTH. It is your responsibility as an SE (Special Event) station to check your logs, verify the contacts, then send me a note letting me know how many Anniversary Certificates you'll need to return the SASE's you've received. I'll send you the appropriate number of Certificates and you can complete them with the QSO info.

We'll award a plaque to the FISTS member who works the most stations that weekend and other awards as participation warrants. I realize that some FISTS may be a bit apprehensive about being a SE station, so I'll have a sample QSO exchange and more details in

the next KeyNote. I'll submit info about our SE to the major magazines to help publicize it.

If anyone would like to submit a design for the Anniversary Celebration Special Event certificate, in one color, pse go for it and send it to me.

Many, many thanks for all your cards, calls, letters and Emails regarding my debate with W5YI! I'd love to print them all here in the KeyNote, but it might go to my head to see them in print all in one place, hi.

I really appreciate your support. As you know CW, Ham Radio and FISTS are very important to me and your feedback lets me know I'm on the right track.

The Pro-CW requirement side of the Debate sure has been downplayed, particularly by CQ magazine. They ran a two and a half page article by W5YI under the heading of Washington Happenings, giving his verbatim transcript plus a whole lot more. All that was mentioned about the Pro-CW side was that "the debate was against WZ8C of F.I.S.T.S." They never contacted me to offer equal time, which I think is very unfair. W5YI even got FISTS name wrong, calling us F.I.S.T.S.!

After hearing about this article, I faxed them the transcript of my opening remarks, without the embellishment they allowed W5YI, but I never heard anything from them. I just wanted to let you know that I DID try to get them to be fair and print the other side of the story, but they chose to ignore me and all the other FISTS who told me they wrote to CQ in protest.

I hope you had a FB Field Day! The FISTS of MI Field Day was great. The weather couldn't have been better; low 80's and a gentle breeze. All the tents stayed up, the antennas worked great - no interference between rigs, batteries lasted all weekend. Twelve people show up over the course of the weekend. Everyone who wanted to operate was able to and we had enough people logging, too. We even had a crew there for set-up and tear-down. We had a delicious Saturday evening potluck barbecue. Everything was practically perfect - I don't know how we're going to top it next year! Well.... Maybe next year I won't burn the bratwurst for Sunday's lunch...but they were still tasty!

There's a membership list enclosed in this month's KeyNote, making it a record 40 pages! Whew! Hope you enjoy it.....

HOW DO I...?

...ORDER CLUB SUPPLIES? Irene WO8E 25206 Hayes, Roseville MI 48066 has Gold logo stickers, 200 for \$5 Blue enamel/gold metal clasp-back logo pins \$3.50; Cloth logo patches 3" octagon shaped \$1.50 Rubber stamps with the FISTS logo for use with an ink pad (not included) for \$5. "I Support KNOW Code" buttons for .75 Pse make checks out to FISTS. These prices DO include first class postage.

Cobalt blue w/gold FISTS logo coffee mugs are available from Joe Falcone 9614 Arden Ave, Livonia MI 48150 for \$4.50 plus \$3 postage - make checks payable to Joe Falcone.

...GET AN UP-TO-DATE MEMBERLIST?

The list is printed in the KeyNote twice a year and is also on the Web page. A printed updated list may be obtained by sending \$1 to Ed N7CFA 2628 Lilac Street, Longview WA 98632.

...Get on the FISTS On-Line Email List?

Send your Email address to blafont@tir.com

...GET/SEND FISTS QSL CARDS Via BURO? Brian W8BL 3050 Rochester Rd, Dryden MI 48428 handles the Buro. Pse sort your outgoing DX and NA cards alphabetically by call area.

To get cards you may have waiting, send loose stamps to Brian and he'll use them to send your cards to you as they come in.

...RENEW MY KEYNOTE SUBSCRIPTION? Send a check/ money order made out to FISTS for \$15/year to Nancy WZ8C POBox 47 Hadley MI 48440

SPONSOR A DX FISTS?...

DX FISTS have a separate block of numbers; their Keynote is mailed from Geo G3ZQS. Send their info to Geo 119 Cemetery Rd, Darwen Lancs, BB3 2LZ; he'll send them a DX application.

...HAVE APPS/SAMPLES SENT TO FRIENDS? Send their address, SASE or loose stamp to hold down expenses, to Joe K5HLR 29 Melrose Dr, Marrero LA, 70072. Pse enclose \$1 if sample Keynote is requested.

...APPLY FOR THE CENTURY or WAS AWARD? Send a list of contacts (call, FISTS #, qth, date, time, band) and power used to Lee N9NVV 4530 N 15th Street Terre Haute IN 47805 Don't submit QSLs

...VOLUNTEER FOR or GET A CODE BUDDY?

Ed WA3WSJ 775 Moonflower Reading PA 19606

...SHARE COMPUTER SOFTWARE?

Joe WZ8U 5428 Bolander Grand Blanc MI 48439

...GET MY PHOTO ON THE PHOTOPAGES? Send a snapshot of yourself to Ken W8ROG 25206 Hayes Roseville MI 48066.

...GET A COPY OF FISTS PRESENTATION

to give at my local club meeting?

Contact Randy K8EZ, 2674 Gemini Dr, Lk Orion MI 48360 email - k8ez@concentric.net

...FIND THE WEB PAGE?

<http://n9nvv.qrp.com/~fists>

...SUGGEST IDEAS FOR THE WEB PAGE?

Contact Bill KK4KF at bjmyers@arc.net

...ORDER FISTS CLUB QSL CARDS?

send SASE to WX9X at 354 West St, Valparaiso IN 46383

...ORDER A FISTS CLUB ID BADGE?

Our club badge is dark blue, with FISTS logo in gold and your name, callsign and "Int'l Morse Preservation Society" in white. They are \$6.95 postpaid from The Signman of Baton Rouge 879 Castle Kirk Dr, Baton Rouge LA 70808; email nv5a@aol.com

...IMPROVE MY CODE SPEED and MEET LOTS OF NEW FRIENDS? Join FISTS! Get involved in the nets and activities!

CODE BUDDY APPLICATION

FISTS #

Name _____

Callsign _____ License class _____

Mailing address _____

Email address _____

Phone number () _____

Bands worked _____

Sked time preferred _____

Approximate Code Speed level _____

Do you want to help a newcomer, do you need help getting your speed up, making those first few contacts? Pse describe your situation and/or goals:

Please list any other info that will help us hook you up with a Code Buddy:

Thank you for joining FISTS Code Buddy program. Send this info to Ed WA3WSJ 775 Moonflower Reading PA 19606

WELCOME TO THE NEW FISTS

- 3490 N1GDH Ed in Webster MA
 3489 N5OB O.H. in Midfield TX (WA5SNL)
 3488 K0PW Paul in Burnsville MN (K5HLR)
 3487 KO4OR Bobi in Pensacola FL (KS4IE)
 3486 W8CCN Tom in Fairmont WV (W4DXB)
 3485 N0TBM Brian in Thornton CO (N5VC)
 3484 N4KTW Charlie in Tuckerton NJ (WB2FXK)
 3483 KB2NIF Paul in Somerville NJ (W8VQV)
 3482 N0LAG George in Muscatine IA
 3481 VA3JEG Jim Woodbridge ONT (N3XJQ/N4ZMP)
 3480 KB9MUU Al in Quincy IL (AA9LS)
 3479 KB2XX Paul in Charlottesville VA
 3478 KB7AQD Robert in Phoenix AZ (AE2L, NY2V)
 3477 W3CL Carl in Washington DC (W4HU)
 3476 KD6VMY Ernie in Escondido CA (K2SB)
 3475 KA3UXU Larry in Leola PA
 3474 KC5HLO Bob in Alice TX (KD5KP)
 3473 AA0VF Bob in Bailey CO (AI9L)
 3472 KE6PWJ Bill in Los Gatos CA (K4HXM)
 3471 K6CB Chris in Bishop CA (W6KN)
 3470 W8DEA Don in North Canton OH (AE4AI)
 3469 KK5LM Wes in Raymond MS (K5HLR)
 3468 AC6YD Patrick in Rohnert Park CA (KC5GXC)
 3467 N7TX Steve in Mesa AZ (K7GT)
 3466 W1OLK Ralph in Lexington MA (AA1RX)
 3465 WB0CFF Carl in Belle Plaine MN (AF9H)
 3464 W3DP Dick in Camp Hill PA (WS0I)
 3463 KF6GCZ Hap in Boulder Creek CA (KF6GUH)
 3462 AC6WQ Rob in San Dimas CA (K5HLR)
 3461 KB8MMA Yvonne in Harrison MI (N8HG)
 3460 AA9UO Jim in Dekalb IL (N9RFR)
 3459 WB8DWD Jim in Greenville OH
 3458 K4NR Tom in Gunter AFB AL (K3LT)
 3457 N7DOH Paul in Newcastle WA (Web page)
 3456 WB2ART Ken in Sayville NY (WA6PWG)
 3455 KD4LRP Rob in Falls Church VA (KE4HZM)
 3454 W8JMA John in Waterford MI
 3453 N9SQT Allan in Rolling Meadows IL
 3452 NL7C Jim in Anchorage AK (KL7GN)
 3451 K6PZE Dick in San Diego CA
 3450 N4UY Jake in Vienna VA (AC5JH)
 3449 KK5WH Doug in Choudrant LA (AI9L)
 3448 XE1ABE Hugo in Morelia Mexico (AC5JH)
 3447 KF4DPS Jim in Gadsden AL
 3446 AA1RR Paul in Malden MA
 3445 KC5VGQ Stephanie in Richardson TX (AD5X)
 3444 KB9LYM Jackie in Madison WI
 3443 NN6C Mike in Poway CA (KF4JRO)
 3442 KR1B Bob in Norridgewock ME
 3441 K0HHB Tom in St Louis MO (K0CNS)
 3440 KA8FCC Don in Mount Vernon OH (AA8WP)
 3439 KC5WUS Jim in Amarillo TX (KF6GUH)
 3438 W1GU Michelle in Monmouth ME
 3437 W1KX Bill in Monmouth ME
 3436 W6AR Dewey in Palmdale CA (W6DDB)
 3435 N4EC Ed in Gainesville FL (KS4XN)
 3434 K4HFJ Pat in Gainesville FL (KS4XN)
 3433 KE4ITN Tom in Cleveland AL (N4ZMP)
 3432 K2JY Steve LkRonkonkoma NY (N2XHY/KG2LL)
 3431 AC5JU Jim in Downsville LA
 3430 W4PBL Frank in Lakeland FL (NB2T)
 3429 KQ6EH Paul in Downey CA (N6EV)
 3428 KC5RDC Charlie in Port Barre LA (AC5JH)
 3427 KI0HQ Ed in Lampe MO (WB2FXK)
 3426 K7ZYV Carl in Biloxi MS
 3425 KB3AWR Forrest in Trafford PA (N2SLB)
 3424 N3VVE Maggie in Trafford PA (N2SLB)
 3423 KB4HAH Gene in Pensacola FL (N4ZMP)
 3422 K1CIK Karl in Reading MI (K1SZK)
 3421 W8DAN Dan in Xenia OH (WA0FAX)
 3420 WL7WH Bob in Anchorage AK (W7UDZ)
 3419 KC5NGS Jack in McAllen TX (KE4JSL)
 3418 KB7TTY Bob in Oregon City OR (N7CFA)
 3417 W9CBT Dick in Glenview IL (W4HZD)
 3416 WR4T Theodore in Cincinnati OH
 3415 W2RCM Rich in Wenonah NJ (K5HLR)
 3414 NN3L Robin in Reading PA (WA3WSJ)
 3413 KZ5W Brad, Cypress TX (#s 3109, 2079, 2481, 2632)
 3412 W9UW Ron in Wis Rapids WI (WS0L)
 3411 N5JEF Mac in Corpus Christ TX
 3410 N7BYP Pete in Seattle WA (K5HLR)
 3409 W2RWH Carl in St George UT (W8EQA)
 3408 K9IH Warren in West Chicago IL (W7UDZ)
 3407 N4ROA Dan in Gate City VA (K3WWP)
 3406 KB9MZK Dave in Wheatfield IN (AF9H)
 3405 KB2TCR Rick, Hampton Bays, NY (KF4DDE/K3DC)
 3404 NM8Y Tim in Circleville OH (K3CJQ)
 3403 N0FDX Donald in Naples FL (N1VWD)
 3402 N3HAM Jerry in Philly PA (N2FX/G3ZQS)
 3401 AA8PJ Jeff in Dover OH (VE1ZAC)
 3400 KC8HRO FISTS CW Club of Michigan
 3399 W4NPL Paul in Huntsville TN (VE3MIQ)
 3398 KC7UXA Steve in Las Vegas NV (WA2BQI)
 3397 N4ZH Terry in Vienna VA (K4WK)
 3396 WA3NSR Bob in White Hall MD (WB2FXK)
 3395 N6DK Dick in Sacramento CA (KE6TEN)
 3394 W9BYH Bill in Tacoma WA (KB0LLZ)
 3393 KM5EJ JD in Houston TX (N4ZMP)
 3392 W8YNY Willie in Crystal Falls MI (N3PM)
 3391 KC8BOJ Ed in Garfield Hts OH (KG8QO)
 3390 KC8HHH Ben (KG8DA)
 3389 K9HT Dave in West Lafayette IN
 3388 KB9GKX RJ in Indianapolis (K8FC/N9NVV)
 3387 KE4QLH David in Atlanta GA (KF4KUO)
 3386 N8TW Ted in Miamisburg OH
 3385 KB0GGQ Al in Mpls MN (KG8WF)
 3384 AA8WP Larry in Mount Vernon OH
 3383 K3VE Steve in Greensburg PA

3382 N1YXU Laurie in Leominster MA (KE1DY)
 3381 W4ZYT Don in Virginia Beach VA (KC4VZK)
 3380 WD0HBW Dick in Little Canada MN (AI9L)
 3379 VE3UKU Tom in Ontario Canada (VE3FMC)
 3378 KC7ORH Jim in Port Angeles WA (KF6GUH)
 3377 K4MR Brad in Lake City FL (AI9L)
 3376 AA9SD Chuck in Redwood Falls MN (N4ZMP)
 3375 K8JWR Dan in Lambertville MI (N8NLE)
 3374 K1HLG Bill in Bangor ME (AI9L)
 3373 N7XN Dale in Tempe AZ
 3372 W6OWP Bart in Paradise CA (N6RNP)
 3371 KE6CTI Matt in Lake Los Angeles CA (W6UJX)
 3370 K0CNS Rick in O'Fallon MO (W8EQA)
 3369 KC3Y Buck in Riviera Beach MD (N3NNH)
 3368 N3DU Tim in Sacramento CA (KE6TEN)
 3367 W8CK Craig in Grand Rapids MI
 3366 KD6POC Adam in Santa Rosa CA (K5HLR)
 3365 NC0A Chuck in Canon City CO (W0RE)
 3364 KE6OIO Dortha in Garden Grove CA
 3363 KA2SJG Jack in Boonville NY (N2ZHF)
 3362 N7KO Rick in Glendale AZ
 3361 WIUBG Bob in Dover NH (KB1FK)
 3360 WC6C Chuck in Pittsburg PA
 3359 KF4MKB Bill in Stuart FL (N4ZMP)
 3358 W9VZR Chuck in Whitefish Bay WI
 3357 KC6IJE "TM" in Palo Alto CA (AD6AG)
 3356 K5NC Waldo in Houston TX
 3355 WA8UCS Chuck in Metamora MI (WZ8C)
 3354 W7GO Tony in Las Vegas NV
 3353 KF4PYE Ed in St Cloud FL (AE4IX)
 3352 KC7SRL Kurt in Cave Junction OR (WA7MMG)
 3351 W4GEK Chet in Oak Ridge TN (W4HZD)

Callsign changes

Bill #2016 AA2YH is now N2WF
 Rick #2662 KB0RMY is now K0QR
 Ray #3164 WB9PIL is now KG9KK
 Roland #2980 KB2WIK is now KG2LO
 Vic #2311 AC5GP is now N5VC
 Jerry #3291 N2XHY is now K6ZLL
 Geo #2667 KO4YV is now W4GEO
 Marc #3160 AA3JQ is now KE6P
 Tom #2627 AC4XT is now N3XT
 Carol #2081 AB2AC is now K2VS
 Allen #2635 WB5BIR is now N5XZ
 Tom #2360 KC8DGU is now KI8CZ

PHOTOPAGE WINNER THIS MONTH

The winner of the June Photopage drawing is:
 The picture on page 12, number 23, Bill **KB9IWH**.

You, too, can be a lucky winner of 200 FISTS

stickers and a FISTS patch. All you have to do is send in your photo for our Photopages! Winners are drawn by random. Everyone who has sent in a photo has an equal chance to win each month, but you can only win once. Send in your photo today! Ideal photo size is similar to the one of me on page 1 of this issue.

SILENT KEY

It is my very sad duty to inform the FISTS club that yet another fellow CW enthusiast has passed on.

Charles Allen, **AA0IO**, FISTS number 1590 succumbed to a short battle with liver cancer on 12 Sunday, 1997. Charles was a fine CW operator.

He will be missed greatly here in St. Louis.

From Peter, **KI0EG** FISTS #2735

CONDOLANCES

Our condolences to Ed **WA3WSJ** and his family on the passing of his father. Ed is our Code Buddy Coordinator. If you're waiting for a reply to a Code Buddy request, Ed asks that you please be patient as he has family things to take care of at this time.

Our sympathy also to Pete **K8OUA** and his family on the death of his mother. You will recognize Pete's call-sign from his work with the Traffic column as well as the Sprints.

CONGRATS TO:

Tom **KI8CZ** (ex-KC8DGU) on his upgrade to Advanced from Tech Plus! Tom says "The 13 wpm code test is easier than I thought. Those who think they can't make it ought to give it a try, they may be pleasantly surprised"

Jerry **K6ZLL** (ex-N2XHY) on his upgrade to Advanced!

Roland **KG2LO** (ex-KB2WIK) on his upgrade from General to Advanced!

Bill **WA8JPR** on his upgrade to Advanced!

CORRECTIONS

Troy #3154 was incorrectly listed as WI0K; should be **WI0R**

John #3114 was incorrectly listed as WB3UEC, should be **WB2UEC**.

Chuck **N8WDH** was incorrectly identified as **N8DWH**. This is particularly inexcusable since I have known Chuck for years. You'd think I've have his call right by now. He told me to remember it by the phonetics 'Wavy Dark Hair', but I can never remember whether it's 'WAVY Dark Hair', or 'DARK wavy hair'. I've changed the phrase to 'Won't Drive Here' since he always complains that our Field Day is too far from his QTH, hi. Sorry Chuck!

George #3030 was incorrectly listed as **VE3MMO**, his listing should have read: **VE3MMQ**, Waterdown ON/**G0TUA** Hythe Kent (W4HZD)

Meet Stephanie KC5VGQ

Hi, I am 15 years old and am in 10th grade. I was first licensed in July of 1996 as a Technician. On Sunday, June 1, 1997, I passed my 5 WPM code test (making me a Tech +) and the General written test. I operated on the 40 meter Novice/Tech+ band for about a week and a half, then went and passed my 20 WPM code test on June 12. I currently hold a General Class license and I hope to change it to Extra in the near future. I love CW and spend my time on the 40-, 30-, and 20 meter bands. All the hams I've talked to have been very nice and encouraging. My only complaint is that when I send my name, many hams drop the "ie" in my name and call me Stephen! I have to go back and tell them I'm a YL and send my name again.

My Dad is AD5X - FISTS #2905 and my Mom is N5UPT. I'm looking forward to receiving my own FISTS number 73 de StephanIE, KC5VGQ

Meet John K3HLU

I've been in FISTS for 6 months, but just getting around to introducing myself. I have been a ham since 1958. First KN3HLU, then K3HLU. Became TF2WKT in Iceland from 1968-1969, W7JEF in Montana in 1971, W4MPC in Florida, then N4JS in the first round of vanity calls...back in 1974!

Operated a lot of VHRF/UHF for 10 years in Mississippi. I was pretty inactive after moving to NJ back in 1986. Back in December, my interest in QRP was awakened, largely by the QRP-L list, and I went on an operating, kit-building splurge. Built a Sierra, ARK4, OHR400, SW160, GM17, WM20, and of course my Emtech (FISTS) NW80, which incidentally, is a great rig! Recently, been working on a couple of the little SST rigs.

I build these things on the graveyard shift. Gives me something to do during those log hours between 1AM and 5AM, when it's quiet at work. Latest project is a CPCW-5 (Cakepan CW-5 watt) TUBE type (6C4-6AQ5) rig, and a matching superregen receiver! These are from Vintage Kit Company. (Am I allowed to mention that they give a 10% discount to FISTS members?)

Anyway, look for me on the CW bands, always QRP.
73 John L. Sielke

Thanks for sending in the biography John, and FB on the Vintage Radio Kit Co I've been meaning to put info about their Cake Pan Radio kit in the Keynote Vintage Radio Kit Co is owned by FISTS member Carl WB1EYE

The Cake Pan QRP Rig Kit

The Cake Pan is a vintage replica "no frills" basic 5 watt, CW-only design that you build in a fully punched cake pan. It has individually packed components with easy to follow instructions and all stainless steel hardware. It includes a custom power transformer and crys-

als. I haven't tried one, but the literature says you can build it in just three evenings.

For more info, contact them at 427 North Main Street, Sharon MA 02067. Phone is 617-784-0847. An SASE would be appreciated.

Response to Popular Communications Editorial

Bill WA6YPE wrote to PopCom in response to an editorial by Harold Ort that said "ham radio is only a hobby" and compared CW to police carrying muzzle loaders, among other things. Bill writes:

...You contradict yourself by using the comparison of police carrying muzzle loading weapons and stating that the U. S. Coast Guard has even dropped CW. I can state from experience, being a former Coast Guardsman who enjoys sailing, muzzle loader shooting and ham radio. Neither the police nor Coast Guard communications could be considered a hobby.

In order to enjoy hobbies where your actions could easily infringe on, disrupt, or threaten the safety of others, it is imperative that you acquire and practice some basic fundamentals. Gun enthusiasts with the latest state of the art rifles and scopes often consider the muzzle load shooter with open sights the cream of the crop. However, if that same muzzle load shooter fails to practice the basics of gun safety, he is shunned by all.

The hobby of Sailing is surely not state of the art or fast compared to other methods of transportation over water. Sailing takes more than just going out and buying a boat, turning the key and taking off. It required skills and effort. However there are many that would much rather just go out and buy all the latest fancy electronic navigation equipment rather than learn the basics of seamanship that will save their tails when they become de-masted and de-antennaed in bad weather. The sailing fraternity takes a dim view of those that won't take the time and effort to learn and practice basic seamanship and basic boating safety.

The hobby of Amateur Radio is not intended to be state of the art and like other hobbies it requires effort and perseverance to gain the basic skills.

One of those traditional basic skills is CW. It allows anyone, anywhere, no matter what their economic status or language to communicate via radio. It is the basic form of communication that will make it through when all others fail.

Is it any wonder that the majority of the ham community feels strongly compelled to maintain the standards of learning and demonstrating the ability to practice the basics of the hobby? Hams, like the skilled enthusiasts of any hobby, have little respect for those that would rather cry about the fact that they just can't buy their way in and haven't the self discipline to take the time and effort required to learn the basics. Thanks for your time. William E. Smith WA6YPE

QRP With John Shannon K3WWP

The last two columns have generated some comments. **KE3FL**, Phil pointed out that I used MW instead of mW in referring to my QRP. I didn't catch that in my proofreading and my spell checker in Word Perfect doesn't know the difference between Megawatts and milliwatts. HI A couple of you want us to review other QRP rigs in the Keynote besides our own FISTS kit. I talked to Nancy about it, and we will do it. Nancy will include reviews as space permits in the Keynote. In fact, I have asked those of you who wanted to see other reviews to write up a review of your favorite rig and submit it to Nancy. Bob, **W3CW** has already said he would take a shot at it. If anyone else wants to try, just write about your favorite QRP rig in the form of a review, and send it to Nancy.

This month my topic is 'pure' QRP Dxing or Dxing with 5 watts ERP. Some of the things I say will be different for the QRPer in a superb location with a huge antenna farm. Also the info I am presenting is mainly from the USA side. I know we have many foreign members, who to us in the USA are the DX. HI

I never thought that QRP and DX could mix unless you had a big antenna farm in a great location. However, over the past 4 years I have proved myself wrong by making over 1000 DX contacts in 127 countries. I believe that anyone with a minimum of effort can get the basic DXCC award using 'pure' QRP. I hope the following tips help you achieve that goal.

The most important thing to remember about DXing, whether it be with 'pure' QRP or a KW into a stacked array on a 200 foot tower, is to LISTEN before you do anything. Of course, before you can work the DX, you have to be able to hear him.

Once you can hear the DX station, now you listen to see where the DX is listening for replies. If you hear him work a station right on his frequency, then you know he's listening there. Zero beat him and get ready to call, but again don't jump in too quickly.

Listen to find out the pattern of the DX station's exchange. Sometimes after the exchange of info, the DX station will just say TU, and then start listening for replies. Other times he will send QRZ?, or QRZ? de X2XXX, or just X2XXX. Some stations send dit dit. Whatever it is, learn when the DX station is done with a QSO and ready for the next call before you jump in.

Now you are ready to try the station. When that tell-tale signal comes from the DX station, send your call

once, nothing else. If you are fortunate, the station will answer you by sending your call and a signal report then K. You say TU and give him a report, and K. He will acknowledge you and move on to the next QSO. Very quick, like lightning, but you now have a new DX country in your log.

Of course that is the ideal situation, and it is not going to work that way every time, even for the most powerful station in the world, and certainly not for the 'pure' QRPer. Not to say it doesn't happen, though. A few times I have beaten out a fair sized pileup to work a DX station. Why? Sometimes it is propagation favoring you, but there are also things you can do to help.

Be sure your signal is as clean, crisp and your keying is as close to perfect as possible. DX stations often mention that it is not always the strongest signal that is easiest to hear in a pileup, but often a weaker clean signal with perfect keying is easier to copy. If you have a memory keyer, use that to send your call. It is possible to get nervous when trying for some rare DX, and be sloppy sending even our own call.

Another thing that helps at times is to delay for a second sending your call so that the last letter or two extends past the main buzz of the pileup. In my case, the DX station would then hear the WP and send WP? Then I send my call again, and make the QSO. That is assuming there is no other WP in the pileup, and everyone acts properly and does not transmit again if their call doesn't contain a WP. And we know the odds of that. Generally anyone who has a W in their call transmits, everyone with a P transmits, and others will transmit even though their call has nothing close to a WP in it. The best of the DX stations in this case will send WP? KN KN and keep doing this until everyone else shuts up except the WP station. If a DX station does this often enough, he can really take control of the pileup and make it manageable.

Pay attention to whom the DX station is working if you keep calling him without an answer. If he is working one W6 after another, and you are a W1, he may have his beam pointed to California at the moment, or propagation may favor the DX to California path right now. Note his frequency or store it in memory and look for someone else. Come back later and see if the DX station is working stations in your area. If so, jump in and try again.

Next month split frequency, DX rag chews, etc. I'm out of space. Visit my web site at <http://www.geocities.com/CapeCanaveral/3852> for more QRP & CW info. -30-

Looking for:

Other FISTS who are using or have modified the Ten Tec Century 21 rigs. Pse contact David Tucker NU4N, 1500 Massac Church Road, Paducah Ky 42001 Tel 502 554 0903

Dave says he had a real nice qso with KA10X/QRP on 20 meters. He was running 5 watts and Dave was running 3 watts with the OHR 20M EXP II. Dave comments that the bands seem to be getting better every day. 20 & 30 meters seem to be staying open later now. Hope this is the start of Cycle 23.

Gordon G4ZPY is looking for a *pair of EX WS American Naval Earphones*. They are pale green in color and usually have a Boom Mic attached. They completely block out all outside noise. Gordon's hearing isn't as keen as it used to be and he is quickly distracted when on the Key (one of the problems of age, he sez, HI). If you can help locate a pair of these headphones reach him at Gordon Crowhurst, 41, Mill Dam Lane, Burscough, Ormskirk, Lancs, England L40 7TG.

Barry Minsky W2BJ/KA2MB is looking for a *Mercury Paddle*. His address is 21st TAACOM Unit 23203 (CHP), APO, AE, 09263.

Smokey's Engravings

In the May CQ there is an article about FISTS #3128, Smokey KN6AE. He does some fabulous metal engraving, specializing in customizing Morse keys.

Becky KG6GUH knows Smokey and says: "I have seen lots of his work and can say it's quite amazing! He has engraved my om's key - with gold inlay! He will be engraving mine key soon and I will send you a picture. I wanted to share his name and number in case there are other FISTS interested in having some engraving done to personalize their keys. His name and address are: Smokey Gaines KN6AE, 640 E Bayan St., Ontario, California 91761 (909)983-8800

"I also wanted to say what a great addition he is to our Fists CW Club. He is a symbol of what we stand for. When I was learning code, he was always there with a encouraging word. After I received my ticket he walked me though my first CW QSO. Patiently, fully understanding my nervousness, and doing his best to make me relax! He encourages good code, not fast code, and has also started a **code practice net on 10 meters, 28.340 from 2300-2400Z Monday - Friday**. He is truly a shining example of what an Amateur Radio CW Operator should strive for.

73 Becky KF6GUH."

If We Didn't Have It, We'd Have To Invent It

ARRL's recent ill-fated Novice Enhancement program reaped minimal results. Enhanced Novices are scarce, indeed. If "now You're Talking" failed to inspire benefits, "Now You're Talking Even More" is even less than thrilling. Current "Everybody Enhancement" proposals appear to be outdated and counterproductive maneuvering toward issuance of ham licenses to every citizen at birth, replete with a vanity call sign.

If noncommercial interests below 30 MHz are to survive in the looming future, narrowband techniques must apply. Extending broadband emission authorizations in our already pinched HF assignments is reverse LRP, long range planning, for the past century's sparsely populated spectrum. When the teeming multitudes in China, India, etc. inevitably join recreational HF radio per capita, one need not be a rocket surgeon to foresee ionospheric bedlam. Add to this the factor of surging radiational noise pollution.

Amateur radio is fortunate to have available a simple, effective and economical tool for the coming crowded HF millennium. Manual radiotelegraphy has served us remarkably well through all the years while other emission fads come and go. Sheer logic requires us to appreciate and preserve CW for continued worldwide Communications Enhancement.

Rod Newkirk, W9BRD #1782

Code Buddy Feedback

I've been a Code Buddy since the end of March, helping Claude, KO6RU get up to where he'd like to be with his CW. It hasn't always been easy, but it's been rewarding and fun, and the regular QSO's have been as helpful to my sending and copying as I hope they've been to Claude.

Anyone who has a little time to spare, whether it's to improve or to help a fellow Fist improve his or her code skills (or both) should give it a try. The best part is that you'll make another good friend on the bands. If this makes it into print it will be after the Sprint, and if I worked you, thanks! 73 de KQ6ES John #2406

My first code-buddy experience was successful. My "student" has just informed me that he now has the confidence to make CW QSO's with other hams.

I'm happy that I have helped him..... I'm sad because I'll miss our CW QSO's and our other contacts via the phone and mail. Once again, because of FISTS, I have met a nice person whom I consider my friend. 73, SAM KB8OOM #1582

News and Views From FISTS Members

From Paul **KC5RGQ**: Glad to finally get my application into FISTS. I received an application from **AC6QO** back in January '96 and misplaced it. When this one came from **K9JXW**, I sat down and completed it right away. I hope to be an active member.

Shortly after I first got my license back in October of 1995, I managed to obtain a rather badly broken right arm. Not wanting to put off getting on the air, I learned to send and copy left handed. I still use the left hand on the paddles. Started learning the straight key with the right hand in time for SKN this year. Just passed my 20 WPM test, on the first try, this last weekend and I'm looking for the new Extra ticket to arrive in the mail soon.

I'm a member of a small club of CW enthusiasts here in Alamogordo. Most of us like to get on the air on ten meters and just spend time chatting, much as we would if we were using the mike. We even work MCW over the club 220 repeater with our home brew rigs! This conversational CW practice is great as you develop vocabulary not normally used in a QSO. My transition from 5, to 13, to 20 WPM was comfortable with no conscious effort to build my speed. Guess I'm just repeating what everyone says, that the best way to learn CW is to get on the air and use it!

My goodness Paul, learning to send left-handed with a broken right hand certainly shows dedication! That's amazing! Welcome to FISTS!

From Roland **KG2LO**: I have been having loads of fun meeting new friends on the FISTS calling frequencies. Folks on the CW bands are the greatest! I look forward to receiving the FISTS newsletter and read it cover to cover. Keep up the good work! Hope to meet you on the air waves some day. Take care es TNX. Thanks for the kind words, Roland! I'm glad you are enjoying being a FISTS. Congrats on the upgrade to Advanced!

From Ken **AD4OS** "The Voice of Purdue University": I was wondering if you know if there is a FISTS group getting together for field day in Chicago area. I have an internship with Motorola's cellular division in Arlington Heights this summer, as a rf engineer and will be away from home during field day. I would like to get together with other cw buffs. If there are none I am sure Motorola has their own club. I can be reached at my email address kwarren@ecn.purdue.edu or call-book address. I not sure of a phone number yet.

Wouldn't you know I didn't get this in the KeyNote in time for FD - but maybe you can get a FISTS group together to operate the FISTS Anniversary Special Event! Congrats on being elected Pres of the Purdue Ham Club, Ken!

From John **KC1MI**: I thank all of you for pulling for me during my hospital stay and what turned out to 2 major operations. Received some new plastic intestinal tubes and needed more emergency surgery in my throat. Guess the surgery in the intestines did not go 100% because a priest was called in to administer last rites. I was told ahead of time however that this is a pretty rare operation but my only out. So being the stubborn ham that I am, I said "lets get on with it, I'm no good this way".

Thanks to all of your thoughts and prayers I made it. I am house bound and in serious pain but the pain medication helps a lot. Am very weak and have lost lots of weight which I need. Very weak so spend most of the time relaxing in the bed and eating like a horse. The doc won't let me exercise yet but pretty soon, to build myself up again. I'd like to thank the club publicly for their thoughts and prayers. I really got a kick out of your card, it really cheered me up. Well till next time, my visiting nurse just said "back to bed" 73/88 to all for now, John **KC1MI**. We're glad your operations were a success John, and hope you have gotten your strength back and we hear you on the air soon! You're in our thoughts.

From Alan **WA0FAX**: Another Sprint has come & gone. Sure makes a nice little contest for a Saturday afternoon. Seemed to be more FISTS this year too. 40 meters wasn't bad, 20 seemed kind of flat. I didn't hear anything on 10 or 15. I also called CQ on the 40 meter novice band until I was cramped, but didn't get a novice/ tech response. Where are all these hams hiding. All I work up there are other guys trying to work novices. No wonder they want to give these bands away. I guess the night time is far more active tho'. Did work a Russian FIST right at the very end. Worked FISTS that I have talked to before, some many times, as well as many new ones. The FISTS QSL buro will be busy for sure, which is another good benefit. Anyone who wants to participate in an easy contest, meet new FISTS or fill in the blanks their Century Award sheet - get into the FIST activities. That's what it's all about.

Yep Alan, that's what it's all about! The Sprint is alot of fun. The results are elsewhere in this issue of the Keynote, along with more comments

From Alan **K6SRZ**: Is there a FISTS calling frequency on the WARC bands? In California, 14.058 is jammed with all manner of QSO's and late at night when I do much of my operating, 7.058 is obscured by Asian SSB. The top end of 30 M is often clear.

This has been discussed quite a bit, but no one seems to be able to agree. Let's try the top end of 30 and see what happens, OK? Let me know how it goes.

From John **KG9HE** # 2501: Here we are in the mountains of east Tennessee, or as the old timers call it, Upper East Tennessee. The move went off without a hitch, and all of my radio equipment, and computer arrived in working order. Couldn't wait to put the shack together and get on the air.

Had two brand new Radio Works antennas and four ideally located trees, so with a little help from my wife, my trusty slingshot, and a local ham, I have them positioned. The Super Loop faces northwest, and the Carolina Beam faces northeast. Amazing what a little elevation can do.

My first week resulted in numerous early morning contacts into Australia and New Zealand on 30 meters, think I had a few Japanese stations thrown in too. Didn't get any FISTS #'s for my first Century Award though. Wonder if we have members down under?

Second week concentrated on European and Mid-East paths. Again no luck on the Century Award. This surprised me because I have had a number of FISTS contacts in England and Europe and know there's a bunch over there. These contacts, including one in the Ukraine and one in Macedonia, were on 20 meters near the FISTS calling frequency at around 22:00 utc.

The local Amateur Radio Club is very active, involved in many local events. Many trying to upgrade, and I hope with the presence of a CW nut, they will be fertile ground to plow for FISTS.

Thanks Nancy and the group for a great club, and special thanks to my friend Bob **N9UUI** FISTS # 2402 for the sponsorship and periodic skeds on 30 meters. If anyone is interested, especially county hunters, look for **KG9HE**, FISTS # 2501. I'm usually on 30 meters early and late, and also 20 meters calling CQ FISTS on frequencies 10.110 and 14.058. I may be the only active CW operator in the county. From Johnson County in Upper East Tennessee. 73 John.

FB John, I'm glad your move was successful and you're back on the air so soon! We do have FISTS in New Zealand, but I don't think we have any in Australia yet.

From new FISTS member Ernie **KD6VMY**: Just a note to say it was a pleasure having a QSO with a gentleman op Mr. Branca **K2SB**...There is a difference with a FISTS op, I have noticed...they never hurry the QSO and always say a great thanks, well wishes, great conversation and an interest in the QSO. **K2SB** did as promised, followed up with a form for FISTS and no hard sell -- only kind words for FISTS and members. Welcome to FISTS Ernie, there certainly is a difference when you work a FISTS member on the air -- one of our mottos (coined by Don **KC4UUG**) is "when you work a FIST, you work a friend."

ISSUE 7 1997

Bunny **AE4P** sends in his renewal with the note: Just wanted to let you know how much I enjoy the FISTS Club members. I qualified for my 2nd Century Award today!!! Finally got to talk to Irene **WO8E** just before the Spring Sprint began.

Thanks for the renewal Bunny, and congrats on your 2nd Century. I'm still working on my first, believe it or not!

Dan **AE4AI** writes: I am pleased, very pleased, to be a part of FISTS. I send copies of the application/info sheet out with every QSL. It is an honor to belong to such an outstanding group of decent hams. Thanks to you and all the other great ops who work to make FISTS possible. I am a single parent and see to have little time for radio, but when I do I head for 7.058 or 14.058.

FB Dan, I'm glad to hear you are enjoying being a FISTS member. Being a single parent must make it hard to find time to get on the air. I've never had any kids, but sometimes I feel like a 'mother hen' with FISTS. Maybe that's why I rarely have time to get on the air, hi.

Bob **N9UUI** sends in his renewal and says FISTS is the best club he's been in yet! He's enjoyed meeting nice people like **N3XJQ** and **AC5GP** on the air and hopes to meet many more.

From Gene **KI0FM**: I'm sending in my renewal for another year, thanks for last year. Have been off the air for 7 months now but should be back on the air soon. Enjoy all of the articles in the newsletter. I want to thank Scott **W3CV** for the article about Emtech. I purchased a complete kit and should be on the air shortly QRP 40 meters. This is one nice kit, my first kit. **K3WWP** John Shannon's articles got me interested in QRP, keep up the good work. I love the FISTS CW Club. How about this, "Try the rest, then go for the gold and join the best; FISTS CW Club."

Thanks for the renewal Gene, when you get your Emtech built drop us a line and let us know what you think of it!

I was sorry to read this letter from Carl **WK4CR** (ex-**KR4VQ**): I won't be able to renew my subscription this year. Am not doing too much radio lately. Guess ham radio was getting to be more important to me than my family and was overlooking a few things so I better get my act together. Maybe someday I'll be back, but for now I will call it quits. If you hear from any of my friends like Don **KC4UUG**, Maggie **WP2T** or Scott **W3CV** please say hello for me and tell them that I always remember them. So long for now, God Bless! Hope you work things out and we hear from you soon Carl; We'll miss you on the air!

From RJ (Bobbi) **KB9GKX**: Thus far, I have managed to work one FISTS member; given a limited amount of activity, low power, and my closest crystal being 2kc high (7060), that's really not too bad! He was the first QSO on my recently-completed 1930's Jones Regenerative Oscillator single 6L6 transmitter, about 10W out. Did succumb to temptation and set up the HW-9 yesterday—looks a bit funny among all the 1930s-50s gear but it's more frequency-agile and less TVI-prone. Would probably drive an 807 pretty well, too! You must have a fascinating shack, Bobbi! Thanks for the history of CW terms article, which I printed elsewhere in this month's KeyNote. I'm sure many will enjoy reading it.

From Lou **NB2T**: Hello, I have been a member of FISTS since Feb. I have just applied for my Century/QRP award. In the three months it took me to work over 100 points, I have never had so much fun getting back on CW again. I joined at the request of a dear friend, John **WB2EX1**. John and I operated RTTY for many years together. But he has always been a CW operator.

Your group of fine CW ops are always there to help. I have brought one ham into the FISTS group and I think another one will follow, since he asked me for an application. I still believe very strongly that CW should remain as one of the requirements for getting on HF. I have voiced my feeling to parties concerned at the League, and other people that CW is the only way to show any newcomers into this fine hobby. Too many changes in this hobby are not helping, but hurting.

The FISTS group are showing the right way to get into the hobby. I can't believe that over 500 people have joined this fine group since I did. You must be doing something right. CW Forever. Good CW operators show the way. 73 Lou **NB2T**

FB Lou, thanks for letting us know that you're enjoying your association with FISTS. FISTS members have good reason to be proud of themselves and our club, I think we set an excellent example of CW operating on the bands! And Congrats on getting your Century/QRP in only three months — that's remarkable!

Ken **W6NKE** sends in his renewal for two more years with the note "This will cover me for a few more years. I'm currently 77 and hope I will have to pay for further renewals! I read your debate with **W5YI** with great interest. You hit the nail on the head! The elimination of the code requirement is strictly based on greed (money)! The same applies to the manufacturers of ham radio equipment. Profit is the bottom line and the good

of ham radio is way down their list of priorities. Unfortunately the same basis, profit, exists in some of the major ham radio organizations. I feel FISTS is the major stronghold of preserving CW as a requirement of obtaining an HF license.

"I've been a ham and commercial operator for 16 years. There have been many changes during that time. However, the move to eliminate the code requirement for HF license privileges is the most frightening. It will open Pandora's Box and they'll never get the lid back on!

"I've been able to work a number of FISTS members around 14.050 kHz but haven't encountered any on 40 meters. What frequency do members hang out on the band? You'll find FISTS all over 40 meters, Ken, particularly on the .058 area — or try the Novice band around 7.108.

Some thoughts from Jack **WB2FXK**: 'Everybody asks how many FISTS I have wrkd - no idea, but nearly 400 QSL's so far. Probably 50% on your .058 freqs. When I hear someone calling CQ FISTS or some other club I always think they want to QSO a member of group, so I very seldom call CQ FISTS if I just want to QSO and I catch a lot of non-FISTS ready to join up. (Jack is one of our most successful "recruiters"!)

"I had a great time in Dayton w/ everyone but you and Irene (**WO8E**) really make the weekend. I never remember all the FISTS I met, hi. Great QRP column but think they should give US a lil (LOT) credit for digging those weak signals out of QRM/QRN/QSB, hi! Don't let us get in the habit of knocking other modes, etc of Amateur Radio to make CW look better.

"I'm teaching code still and believe getting on the air and working stations is the best, easiest and most fun way of learning code. Some people can enjoy tapes and WIAW but I never did. Also not interested in how fast you or I can copy, just so you can copy me and I can copy you thru QSB, etc. Probably most QSO's run under 25 wpm, so I'm in this hobby to communicate and enjoy. Thank goodness a lot of hams have slowed down for me over the years so I could enjoy and have stayed with it.

"Thank you for being a FB Rep for FISTS in the debate with **W5YI**. You sure did a great job, professional and did not get off the target. I sure ramble a lot, but wanted to stress that we appreciate you very much." Thanks sooooo much Jack, I really appreciate your kind words! Next year in Dayton, don't forget to check into the FIST Booth before you go flea marketing so we know you're there, hi! This year, Jack didn't check in with us until late Friday and everyone was asking "where's FXK??" He had us worried!

Bud **WA2BQI** has been quite 'radio-active' in 1996! He has over 85 certificates and awards, but says his FISTS Century Award (#174) is the best looking certificate by far. His results for 1996 are

1. WAS 2. WAS-40 (last state needed was DE, and wudn't you know it, he was a FISTS member K3AS!)
3. FISTS Century Award
4. 2nd place out of state for NC QSO Party/97
5. 1st place NY for TN QSO Party
6. 1st place NY for IL QSO Party (2nd yr in a row)
7. 3rd place NY for WA Salmon Run
8. 1st place single op single 40 mtr ARRL DX 'test
9. 1st place operating 96 Field Day class 1D
10. 1st place NY for NB QSO Party
11. 5th place NY for WVA QSO Party.

Bud's comments concerning the CW Debate is "STOP YAKKING - START CLICKING"

Bob **W1FHP** sent me a sample of the QSL card he sends out for his club CW contacts - it has a sketch of a hen with headphones sending with a straight key and says "from the Hen House Gang" and of course, the FISTS logo. Very cute!

Gordon **G4ZPY**, of G4ZPY Paddle Keys International fame, sent along a very nice letter, saying that he's hearing very good reports on how well the NA FISTS is doing. Gordon says he tries to get on the air most evenings (UK time). He was off the key for about 10 years because he just could not find the time, but Brenda (his wife) insisted that it was time he got back on it. He says he "was scared stiff at first, because my CW had sadly gone down hill. I am getting back up to speed slowly now, and can go about 20 on a good day. On a bad day I'm down to about 14. It is embarrassing when people expect you to be able to tx at about 30. I don't think I shall ever get back to that speed, because my poor old brain won't work that fast these days. My keys will not be collectors items for a while yet. I am not ready to "cock my toes up." Thanks for dropping us a note, Gordon And FB on your not being ready to "cock your toes up" - I don't have one of your straight keys yet, hi!

PS: We have applied for, and received, the Domain Name of "fists.org". Consequently, the URL of our Web Page will be changing in the near future to a more simplified address, probably "www.fists.org". Lee **N9NVV** is working on switching the systems over to the new address. We'll keep you posted on the progress and let you know when you can start using the new address. The old address will have a link page, so people still using the old address will be able to find the new page.

CW In Canada

Here in Canada, we have a problem that doesn't seem to have a solution. There is a very small percentage of Canadian hams that belong to RAC, I think it is about 25%. RAC officials have decided, with no debate, that their job, after elected, is to "Make decisions" on behalf of Canadian amateurs. Their decision on code.. is no code. They have closed the books on the issue and are not interested in any sort of democratic process to deal with this issue.

Sadly, myself, and other hams have found that there seems no way to deal with this issue, without bypassing RAC, and lobbying our federal radio department, Industry Canada, directly.

IC has responded with dismay, and has temporarily halted a transfer of powers to RAC in regards to license administration, etc. RAC thinks this is a terrible thing, and do not see this as a lack of confidence in there arrogant ways. (They believe this is strictly a financial thing) . I do not know where this is heading. Insight from you or anyone else at FISTS would be much appreciated.

There is no official survey of the approximately 47,000 Canadian hams on the issue. But straw polls continually indicate that the retention of a CW requirement is favoured.

It is very unfortunate for all of us that we have such a narrow focused and undemocratic group as RAC. And, of course, their view on the code requirement is disheartening.

With any luck, they will pay some attention to the ground swell of opinion in the USA about this code issue. Thanks to FISTS is due in no small measure!

Jeff Smith **VE1ZAC # 2048**

Novice Band Calling Frequencies

I think we all agree that we need more activity on the Novice Bands - Arnie **KT4TK** writes in and say: "We as Fists, always talk about trying to help others learn the code. That's a great goal and I think we should continue to do just that. I do think, however, that we need to have specific calling frequencies within the Novice sub-bands like we do in the General portion of the bands. The following are my recommendations:

10 meters.....	28.108
15 meters.....	21.108
40 meters.....	07.108
80 meters.....	03.708

Let the CW amateur community get to know these frequencies and they will start to be used.

I didn't consult a band plan to get these, so hopefully I didn't step on someone's toes (hi). Arnie-**KT4ST**"

MONEY, Money, money

With all the new FISTS joining up, there are probably some questions about "Where does all the subs money go?" As you might imagine, most of it goes toward postage and printing. Each new member gets a certificate and complete set of photopages (if you haven't gotten yours yet, don't worry - I'm working on it!). The certificates cost about a quarter and the package costs .78 cents to mail.

In a typical month we spend .55 for a KeyNote (24 page); .10 for a single sided photopage and .27.7 for postage. Add that up, multiply by 12 and it comes to about \$12.15. So, 80% of the subs goes directly toward the newsletter and new member packets.

Sending out samples and applications to prospective members gets VERY expensive at .78 apiece for postage. In fact, we are going to stop sending out sample Keynotes to those who do not include sufficient postage or a green stamp. I hate to do that, but it's eating us out of house and home. Joe KK5HR is doing a fabulous job keeping track of all this and sending out the requests for FISTS information.

From now on, when we get a request for information, Joe will send out one of the tri-fold brochures like we gave out in Dayton. It tells quite a bit about FISTS, includes an application, and best of all only costs .32 to mail. That will help keep expenses in line, as we get at least 50 requests for info a month.

The PO box, bulk mailing permits, Web page DNS, Century and other awards, and the QSL Bureau are paid for by the subs money.

The buro is supposed to be self-supporting, so PLEASE include some stamps when you send in cards or a dollar once a year if you send DX cards. DX postage is at least \$5 a month, which adds up to over \$60 a year. If everyone who sends cards chips in a little it would be appreciated!

The member roster is published twice a year (Jan and July) in the Keynote. The new FISTS are listed in the Key Note each month, so you can keep your list up-to-date by keeping track of these. If you need a list please send a dollar to defray the expense because the membership roster is 10 pages long now. The list is also available on our Web page - the space for which is donated by Lee N9NVV, our NA Award Manager.

Other costs we incur are the Presentation materials. We have three sets of them and include sample KeyNotes and applications. We also have a small investment in audio cassettes for our Talking KeyNote which is sent to our blind FISTS members.

Having the booth at the Dayton Hamvention has been a big boost to FISTS. We are very grateful to the Hamvention people, who have given us the equivalent of a \$500 booth for the last five years! But, that doesn't

mean it doesn't cost FISTS anything. We pass out a thousand sample newsletters, applications and info sheets at the Hamvention each year.

And there is the hardware that keeps FISTS running. We also need software for making the KeyNote, keeping track of the finances and members, as well as paper and ink for the printer, stamps, and phone calls.

Whenever we have any excess in the bank, I "reinvest" it in supplies. Buying things like patches, pins, stamps in bulk lets us pass the savings on to you. These items are sold at cost, so there isn't any profit involved.

I've been asked about Life Memberships. I like the idea, but FISTS is growing so rapidly it's hard to get a handle on what the projected costs are going to be over the next few years. I'd hate to commit to a price for a onetime Life membership, then find out we don't have enough to run the club down the line. We haven't had a subs increase in our 10 years - in fact it's been reduced. Original FISTS may remember that subs used to be \$17.50. We really are operating on a shoestring, and I'm doing what I can to keep the costs down.

All FISTS workers are strictly volunteer - no pay, but I'm sure I speak for all of us when I say that the satisfaction of seeing FISTS grow is the very best "perk" we could ask for!

PSE QSL! by Bill Roberts, K7UF #3122

I enjoyed Marty Reid's #2668 letter. It was ten years before I realized there was a mic jack on my rig. Marty's letter brought back memories of all night CW sessions as a Novice on the 40M band. I still have my first PR crystal, but now it's mounted on a wall plaque. I spent many sleepless nights worrying if the FCC could tell if I was running 90 watts from my Globe Chief.

That was over 30 years ago and I still find myself in the middle of the 40M Novice band working the new operators. If it wasn't for some of the Generals helping me improve my code skills I would never have made it this far. The Novice was a one year license and not renewable. I have made it a point over the years to continue the practice of helping the new operators. I may dose off between the letters now and then, but I remember I also started out the same way.

It was always an unwritten rule on CW to send a QSL card. No self respecting Ham would ever think of asking for a SASE. When a card was received, a card was always returned. Of the last 35 cards I mailed, I have received only 12 in return. Come on guys get with it. CW operators are few and far between, perhaps a dying breed if others get their way. Lets keep our fraternity an elite group of radio operators. Be proud of your call and your stature, send out your QSL's. Help keep our ranks strong; professional and courteous. We are what Ham Radio is all about! Bill K7UF

Product Review: MFJ-9420 20-meter QRP SSB Transceiver by Phil Salas - AD5X

Oh no. What do I need another radio for? Well, I found a great deal on a brand new MFJ-9420 transceiver with microphone, CW adapter, and matching power supply. The price was too good to resist, and I'd heard lots of good things about these rigs.

The MFJ-9420 transceiver is a small (6"x6.5"x2.5") light (2 pound) 20 meter SSB transceiver that puts out 8-10 watts PEP. It was designed by Rick Littlefield who has written many QRP articles over the years. It has a very simple layout which includes few controls: on/off, tune, main tuning, and audio gain. The "tune" button puts out a carrier so that you can adjust a separate antenna tuner or check VSWR. The 9420 uses an analog tuning dial. However, I found this tuning dial to track accurately across the band. The receiver incorporates a 6-pole crystal SSB ladder filter that appears to be very sharp. It also includes a built-in speaker that delivers plenty of audio. The 9420 only draws 100 milliamps on receive, and 2-amps maximum on transmit so you can run it a long time on a small gel-cell. If you think about it, 10 watts PEP is only 10 db (about 1-1/2 S-units) below the typical 100 watt transmitter. MFJ helps compensate for this with an extremely effective audio compressor which keeps your average transmit power higher than normal. This results in an extremely punchy audio signal which elicits good comments from stations that you talk to. Contacted stations are always amazed when you tell them that you are running only 10 watts. As an example, on March 22 I worked ZF2JC/ZF8 (Little Cayman Island) in the middle of a huge pileup. He answered me on my third call and told me I had an honest 5X7 signal!

Along with the 9420, I also received the CW adapter. This helped cinch the deal on this radio since I spend 95% of my time on CW. The CW adapter is a small plug-in circuit board that easily mounts on pins on the main board. Three screws hold it in place. A CW on/off switch and a 1/8" key jack which are mounted on the sub-board line up with holes on the back panel. Circuitry on the sub-board unbalances the balanced mixer to get a carrier output, offsets the carrier 700 hz (this is adjustable), provides a 700 hz sidetone, and provides an adjustable break-in delay time. There is also a variable capacitor so that you can re-zero the main tuning dial after the CW adapter is plugged in. The dial has two scales: the outer scale covers the 14.15-14.35 Mhz phone band, and the inner scale covers the 14.00 to 14.15 Mhz CW band. The CW on/off switch on the CW adapter changes the tuning range between the two.

Since this is primarily an SSB transceiver, features such as full QSK, RIT and a narrow filter are not provided. However, the CW performance is quite adequate.
ISSUE 7 1997

quate. Incidentally, while 10 watts PEP on SSB is considered QRP, only 5 watts CW is. So, I am not really operating QRP when I use this radio on CW.

I also have the MFJ power supply. This is simply a 14 VAC wall transformer, and a small box which contains a full wave rectifier and a 12-volt 3-terminal regulator with three diodes in the common leg which gives a 13.7 VDC output. A 3-terminal TO-220 regulator is only rated at one amp so I was curious as to what a reduced output current would do to the 9420. The power supply didn't start limiting until the output current started to exceed about 1-1/2 amps. Running the 9420 from a high current power supply, the CW output power is 10 watts. Running from the tiny MFJ power supply, the output power was 8-watts. Not bad! There is now a 78S12CV TO-220 3-terminal regulator that is rated at 2-amps. I'll probably give this a try pretty soon.

I do have a few criticisms. First, there is a deposited (on board) printed circuit trace that is the input fuse. If you ever hook up power backwards, you will blow this trace on the pc board. I am going to put an in-line fuse in the power cord and bypass this fuse with a buss wire. Also, the reverse voltage protection diode is a 1N4001 which is only rated at one amp. Since the pc trace/fuse can handle at least 2 amps, the diode may open up before the trace does if you connect power backwards. A three amp diode in this position along with a 2-1/2 amp fuse would make more sense.

Next, the 9420 doesn't have a headphone jack. This would not only be handy for quiet listening at home, but it is also necessary if you want to use one of those CD-to-tape player adapters to pipe your audio through your car stereo system. The 9420 has a balanced speaker output that is not referenced to ground so adding a headphone jack is not as easy as normally expected. I got around this by mounting a Radio Shack RS 274-246 enclosed closed-circuit 3-conductor 1/8" jack in an enlarged hole on the back panel. This jack has an outside diameter of 1/4" so I drilled a 3/8" hole in the back cover and used a 1/4" nylon washer (local hardware store) to insulate the nut from the chassis. I just centered up the jack in the hole so it didn't touch the chassis, tightened it up, and then added a drop of epoxy to the jack to make sure it never moves.

Finally, I would like to add a narrow audio filter for CW, as well as a "spotting" switch and circuitry. There is plenty of room inside for these additions. I'm sure this will happen within a short period of time.

Overall, the MFJ-9420 is a great little rig. They show up on the used market periodically. You can get a good start on HF with this little rig when you get that General Class license, and continue to use it as a portable or mobile rig after you upgrade to a multiband HF rig.

PSE QRS

Last month, I printed a comment from Rich AC4NW, who is of the opinion that slowing down to accommodate those who can't copy faster is not good because they will never increase their skills that way.

From Irene WO8E: I would like to respond to Rich, AC4NW regarding his comments in Issue 5/6 of the Keynote. Rich disagrees with the idea that we should slow down to accommodate the new or slower operators. I believe he has forgotten as FISTS and ham radio ops we want to *encourage not discourage*.

Yes, it is true there are code practice tapes out there to pick up our speed. But there is nothing like the experience of being on the air. I am thankful for Don, KC4UUG and Maggie, WP2T during those early years of Don's net for keeping the net at a speed that all would be encouraged to join in. If they had not slowed up for me, I would never have had that enjoyment of taking part in the Fists net.

I hope that our new members will not be discouraged by Rich's AC4NW point of view, believe me, it is not the Fists view. Irene, WO8E

I disagree with Rich, AC4NW about not slowing down for a slow goer on the air. One of the best ways to discourage a new CW-er is by going too fast for him/her. One of the best ways to encourage as new user is to demonstrate kindness by slowing down and sending beautiful code, and to give plenty of encouragement and praise.

I do not disagree with his methods of gaining speed. I will only add one more which he seems to be against, get on the air and practice by making plenty of QSO's and join a slow net. The MSN (Maryland Slow Net) sends at your speed and then at about 1/3 the way thought all the messages they hope you're up to 15 WPM because by that time they start sending at 15 WPM and you have to request slower. Actually I always ask because even beginner MSNers can be extras & want to go faster, or they can be on their way to that General or Extra & would like double practice, one is receiving fast & one in learning about CW traffic handling.

Bottom line for CW speed? Practice, practice, & more practice. There is no substitute for practice. 73 de Phil Karras, KE3FL, #3117

From Bob AA2SM: I find that just about every FISTS member I have had a QSO with always strives to send at a speed which they can handle and more important they seem to concentrate more than others on spacing and using correct punctuation and "Q" signals. Although I have no problem in copy of a person sending at 30+

WPM and sending correctly, I find it very difficult to copy a person sending 10 WPM and running words together. I often go to the Novice portions of the bands and enjoy working with fellow hams just starting out on CW. One of the biggest enjoyments I have had on CW is having a QSO with a ham and his/hers first ever CW contact.

I have had the pleasure of being a first contact on five occasions and you can almost sense the excitement of the moment for those hams. I remember my first time on CW and let me tell you, I was really nervous. As soon as I made my first contact, I wanted to say 73 and call it a day. It was my luck that after I mentioned it was my first CW QSO, he then wanted to ragchew - hi. I did have the opportunity to run into the ham who I had my first QSO with 6 years earlier. Although he did not remember me, I did express my appreciation for his patience that day, and putting up with my effort. My advice to operators just starting out on CW is to practice, practice and more practice. With that comes confidence in your sending and receiving. There are a lot of nice contacts to be made on CW and a lot of good DX with the use of a modest setup in equipment. I have an old reliable Kenwood TS 830S, an A3S Tribander and a dipole hanging in the backyard, which my XYL on occasion has tried to hang things on, hi. I really enjoy reading the Keynote Note every month. Find it real interesting and sometimes read it three times. 73 Bob AA2SM.

CW ELITISTS? NO!

by Bill Marsh K3AS #2164

Most of you who read this will be members of the FISTS CW CLUB, the International Morse Preservation Society. The stuff that binds FISTS MEMBERS together above all else is a love of Morse. Friendship, courtesy and helpfulness are usually part of the mix. I happen to think this is also true of the CW community at large. But there are differences too. And since we are a CW fraternity the most obvious of these are our variations in skill at receiving and sending Morse code, and operating procedures.

One of the definitions for SKILL in my dictionary is "Proficiency, facility, or dexterity that is acquired or developed through training or experience." The same dictionary also defines ELITE as "The best or most skilled members of a group."

So the best or most skilled members of the CW community become the elite, although I'll bet not many of them think of themselves that way! Even if some do, it's a far cry from ELITE to ELITIST which my trusty dictionary defines as "The belief that certain persons or members of certain classes or groups deserve favored treatment by virtue of their perceived

superiority, as in intellect, social status, or financial resources." Wow, who wants to be one of those! There will always be differences in skill levels, but vive la difference!

I don't believe there is an elitist conspiracy afoot to ignore the newer members of our hobby. The great majority of CW ops do lower their speed to accommodate the other person, without being asked, and try to be helpful in other ways. While there may be an occasional individual whose attitude would not embrace the FISTS code of ethics, they are extremely rare. Many cases of discourteous behavior are simply accidental.

So let's continue with the ham tradition of the more experienced helping the less experienced. As somebody once said "Lets all hang together or we shall hang separately."

POLITICS

Even though FISTS is not a Political Action Group, many of our members are very involved and concerned with the future of Ham Radio. From time to time, I've put articles in the KeyNote, urging you to write a letter to your ARRL officials telling them your thoughts regarding Morse Code and it's importance to you as a Ham and to the future of the Amateur Radio Service.

The only way we are really going to get our message across to the ARRL and The Powers That Be is to have a united voice and make sure our voice is heard. You may think that your vote doesn't count or you may have even given up fighting for CW, thinking that your opinion isn't important. That could not be further from the truth!

This is the time of year when the ARRL is taking nominations for the upcoming election of Officers. Some of our FISTS members are so dedicated to The Cause that they have decided to run for office themselves and fight for what we believe in.

It is important that you participate and vote in these elections. Vote for the candidate that represents your point of view, not just because they've been in office forever. With the WRC-99 and other conferences coming up, we need to be sure that the people in position of influence will have the best interests of our hobby in mind; not who's buying the advertising space in their magazines.

You may decide that you would like to run for office yourself - anyone who has been an ARRL member for four years and holds a Tech license or higher can file a petition and run for office. (See July QST for details) We need to get more officers in the ARRL who will represent the people, not the commercial interests!

If you decide to run, let me know so I can put it in

the KeyNote. As I've said, FISTS is not a Political Action Group, but I think we owe it to ourselves and the future of Ham Radio to be INFORMED members of the Ham Community. Candidates who have Pro-CW points of view deserve our support in the elections.

Joe Falcone N8TI is running for Director in the Great Lakes Division (Ohio, MI, KY). He writes:

"I have decided to run for the position of ARRL Director of the Great Lakes Division. I realize that in order to ensure that Amateur Radio does not wind up as an extension of CB Radio, we all have to make sure that the ARRL acts on behalf of its members rather than on behalf of its paid employees.

"To achieve that goal, ARRL members have to vote into the ARRL's elective offices people who are not willing to sell off the future of Amateur Radio in exchange for a few more pages of advertisement in QST. Just as accommodating the use of thousands of newly purchased CB radios did not "save" CB Radio, eliminating the requirement of learning Morse code to promote the sales of thousands of HF radios is not going to "save" Ham Radio. Filling up our already crowded ham bands with thousands of new single side band signals should not be the purpose of the ARRL.

"The amount of profits of those who engage in the "business" of Amateur Radio should not be the concern of the ARRL. The ARRL should only use its resources to encourage the wise, proper and enjoyable use of our radio frequencies. In order to do so, there must be some form of meaningful licensing requirement. We have learned from the CB fiasco that if we lower or eliminate licensing requirements it will result in chaos and the eventual uselessness of the band. We have learned from the no-code licensing in Amateur Radio that those who truly have an interest in Amateur Radio will make the effort to upgrade. Already in many of our major cities, the Two Meter band is already little more than an extension of the Citizen's Band.

"I want to be elected as a Director of the ARRL in order to give that organization back to its members. If the paid ARRL employees will not support the retention of the Morse code requirement, according to past resolutions of the ARRL's Board, then I will make every effort to terminate those paid employees.

"I urge that FISTS members run for ARRL elective office in each Division and Section. I respectfully request the support of FISTS members in the Great Lakes Division. Joe Falcone N8TI"

If any other FISTS member decide to run for a position in their districts please let me know about it so we can keep the membership informed.

CW TRIVIA

by Roberta J. Barmore, "RJ," KB9GKX

Most of us are vaguely aware that many International Morse prosigns and common abbreviations came over from landline telegraphers. But the details are often mysterious and some of them may surprise you.

Starting with "The End"

The prosign for "end of transmission," _SK_ (or _VA_ for the pro and military ops) seems related to nothing but it has a close cousin in the press service. To this very day, news writers put "30" at the end of a story or article to indicate the end. They picked it up from press ops, who used "30" at the end of a transmission; being landline boys, they sent an American Morse 30: didididahdit daaaah. As press (and other) landline types moved over to radio and the Continental code, they took their old familiar procedures along. Over time, the extended-dah Morse zero became a standard-length dah and the whole was sent as one unique symbol. So the next time you hear some op lean on the key at the end of _VA_, he or she might not be a lid, just an old-time landliner!

ES or &?

The familiar shorthand for "and," es, is not borrowed from one of the Romance languages of Europe as is often said. Landline ops had developed a separate symbol for the ampersand (&), dit dididit. The _sound_ came over to radio, but most of us still copy it "es." If your handwriting when copying with a stick is as bad as mine, it looks about the same.

Expletive deleted, or the story of punctuation.

Originally, telegraph code had no punctuation. Most of it was developed on the spot as the need arose, some of it quite by accident. The early landline ops got a reputation for profanity; many of them were paid by the number of messages sent and received each day, and a mis-sent or mis-copied word often as not prompted a "damn" from one end or the other, followed by the last word received correctly. With the need for speed, it quickly became "dn." Management having taken a dim view of hard language, even that was written as "?" when copying, and thus comes the American Morse interrogative symbol, dahdididahdit. It didn't cross over to radio directly — it is almost as if someone failed to shift their typewriter, for we now use _DN_ for a slant bar (/).

In American Morse "period" was originally spelled out, but soon only the last three letters were sent and even was shortened phonetically to just "ud," dididahdahdidit. It was widely used in early radio, later

supplanted by a new landline version of "." didit didit didit, but the Continental _AAA_ was adopted by treaty in the 1930s.

IMI being such a handy symbol and the question mark having been lost to a nameless typist, it became our "?"

One of the characters Continental code didn't get in any form from the wire gang is "!" For some reason, no character has ever been adopted for the exclamation point. Perhaps they figured we were excitable enough already? On the "Boatanchors" CW net, I often use the three double-dits landline period for "!" Copied as "III," it looks about the same as "!!!" It is a bit much but seems to work.

Best Wishes, Love and Kisses, & Other Popular Numbers

"73" and "88" (along with 4, 5, 25 and 30) were used from the very early days of landline. 73 is probably the most subject to abuse; it has meant "best wishes" from the beginning and the commonly used "73s" is redundant.

"88" has a more interesting history. While us YLs used it among ourselves as a less-impersonal substitute for "73" prior to the invention of "33" (about the same time YLRL was founded) and it has served perhaps more aptly in more than one radio romance, the very nearly all-male fraternity of landline ops didn't mean it in so nice a way. Applied to ops who were thought too fussy over time-wasting niceties, the original implication is probably best rendered for a modern audience as "wimp!"

The other number codes are not widely circulated. A compilation of rail telegraph usage in Tom French's "Railroad Telegrapher's Handbook" (Artifax books, 1991) and information from the Lewis Co. Book, "The Telegraph," indicates that "4" means "Where shall I repeat from" (still used in radio), "5" is "Have you anything for me?" while "25" meant "busy" on commercial wires. (Rail used "25" to indicate high-precedence traffic, and "22" for "busy").

Lid Revisited

The usual derivation of "lid" is that some landline ops used tobacco cans to get a more distinctive note from their sounder in crowded operating rooms, lifting the lid varying degrees to get a sound they could pick out of the multitudinous din, and were derided by the old-timers. I have always found that tale a bit fishy — using a tin can as an acoustic amplifier seems to have been pretty common. One source suggests the term is an abbreviation; an op who couldn't keep up on a fast and busy circuit was often "lifted" and placed on "way" wire where the going was easier. "Lifted" boiled

down to "lid" and if an op was lifted several times, those down the wire asking where he was would be told "lid agn" in the landline shorthand. This became just "lid," and implied a poor operator as it does today.

Many a hapless amateur lid has encountered a Q-signal not found on the official list: "QLF?," "Are you sending with your left foot?" But a clumsy Morse op faced even more embarrassing questions from his wirechief: "How come you're sending with snowshoes on your hand and the key screwed to the ceiling?" or "Why is it you send by holding the key between your knees and squeezing them together?"

Lost and Found

After the Continental or International Morse Code was officially adopted for radio by treaty, most landline symbols either faded out or were "fitted in" to the standard code. One has managed to survive unscathed: we still use the American Morse C in a manner very similar to that of the landline telegraphers. Checking to see if there was traffic on a long common line at a current too faint to actuate his relay or sounder, the landline op would send didit dit, C. And so do we, though it's become all too rare. Even when sent, it's often a prelude to a long series of "V V V N3 TEST" and extended key-down time — I thought modern rigs didn't require much tuning! Must be the antenna tuner.... It's either that, or somebody's wearing snowshoes and has the key tacked to the ceiling.

(Sources: "Dotty Dots and Dashes," Radio June, 1940; various filler from CQ, 1950s issues; "Telegraph Codes And Useful Station Information," undated single-sheet handout (late 1930s), Western Union Telegraph Co. in cooperation with the ARRL; "Railroad Telegrapher's Handbook," Tom French; e-mail correspondence from James Haynes).

Our Web Page

Fellow FISTS:

First, an introduction... I am Bill Myers, **KK4KF**, member #2390. I have been a ham since 1986 and work almost exclusively QRP CW. I spend most of my on-air time on the 40 meter novice section of the bands. I really enjoy convincing these newer hams that there is more to contacts than name/qth/rst. And, I've met a number of our members on this band, apparently doing the same thing...

I am also the keeper of the internet webpage for the N.A. FISTS. Many thanks to Lee, **N9NVV**, for the harddrive space on his system for this page.

What is available on the homepage? Many things!!! You'll find out about the organization, how to join, pictures of the patches, pins, and stamps. Membership

lists are available for searching or downloading. Information of our "contests" and "events", as well as rules when I can get them for posting. A copy of the last CW message sent out on MARS is there as well as the last message sent out from NMN at Chesapeake Bay. I'll be adding a copy of the Keynote for non-members to view as a sample. The current issue of the Keynote WILL NOT BE put on the homepage.

You can also download an application form (Nancy has indicated that many of the current applications are from the homepage). Member internet homepages are linked from there and a list of member e-mail addresses is available. The CQ Magazine article about FISTS is posted. The How-Do-I box from page 2 is also on the homepage.

Picture pages of our members are also posted on the homepage. If your picture was sent out in a Keynote, it is posted. There have already been some concerns about pictures being posted on the internet. The homepage is the "property" of FISTS and if you allow them to post your picture on the picture pages, they also have permission to post it on the internet. If you **DO NOT WANT** your picture posted on the homepage, please drop me a e-mail or letter stating this and I will blank the picture out.

I have received a number of e-mail requests for the homepage to be "modernized". By that I mean adding more graphics and sound(s). I have also received a number of e-mails complaining about the "colors clashing" and thanking us for not "modernizing" the page. While many of us have upgraded our computers to "state of the art" or "I got all the newest stuff available", there are a lot of our members, and nonmembers, that visit the homepage who do not have all these bells and whistles. Many users are still using 14400 modems and are only displaying 16 colors. High resolution graphics are not displayed very well on these systems and take forever to load, even at 33,600. Just like "ACCURACY TRANSCENDS SPEED" I feel that simplicity convey's more information. By keeping the page simple it appears we can reach more people.

As always, comments, suggestions, or complaints are welcome. Hope to C U on the bands. 72/73's to All Bill **KK4KF** e-mail bjmyers@arc.net snail mail: P. O. Box 178 Shalimar, FL USA 32579

Sad, but true.....

Heard on the two meter repeater:

Operator #1: How's DX?

Operator #2: I don't know, haven't seen her since the divorce.....

Ten Commandments of Electronics

1. Beware of the lightning that lurketh in an undischarged capacitor, lest it cause thee to be bounced on thy buttocks in a most ungentlemanly manner.
2. Cause thou the switch that supplies large quantities of juice to be opened, and thusly tagged, so thy days may be long on this earthly vale of tears.
3. Prove to thyself that all circuits that radiateth, and upon which thou worketh, are grounded, lest they lift thee to high frequency potential and cause thee to radiate also.
4. Take care thou useth the proper method when thou taketh the measure of high voltage circuits so that thou doth not incinerate both thee and the meter; for verily, though thou hast no account number and can easily be replaced, the meter doth have one, and, as a consequence, bringeth forth much woe unto the supply department.
5. Tarry not amongst those who engage in intentional shocks, for they are surely nonbelievers, and are not long for this world.
6. Take care thou tampereth not with interlocks and safety devices, for this will incur the wrath of thy seniors, and bringeth the fury of the safety officer down upon thy head and shoulders.
7. Work thou not on energised equipment, for if thou doeth Thy buddies will surely be buying beers for thy widow, and consoling her in other ways not generally acceptable to thee.
8. Verily, verily I say unto thee, never service high voltage equipment alone, for electronic cooking is a slothfull practice and thou might sizzle in thine own fat for hours on end before thy Maker sees fit to end thy misery and drag thee into His fold.
9. Trifle thou not with radioactive tubes and substances, lest thou commence to glow in the dark like a lightning bug, and thy wife be frustrated nightly and have no further use for thee except thy wage.
10. Commit thou to memory the works of the prophets, which are written in the instruction books, which giveth the straight dope and which consoleth thee, and thou cannot make mistakes, sometimes, maybe.

Author Unknown.

Antenna Farms

If you want a really strong signal, you need an antenna farm. A linear amplifier is a good starting point, but without great antennas at good heights, you will be lost in the pile ups. Until now the expensive part of an antenna farm was the towers. A good tower can cost thousands of dollars, making it the most expensive part of the antenna farm. Recent advances in inorganic farming have changed all of this. This paper will give a short introduction to inorganic farming as it relates to antenna farms. Obviously, inorganic farming can be applied to other areas, such as high rise buildings, but towers and antennas are of more interest to amateurs and they are easier to grow.

As always, you will need the space for your antenna farm and soil condition is important. Just as you plant tomatoes and fertilize them with organic fertilizer, you will need the best seeds and the proper fertilizer for your antenna farm. Let's start with a conventional triangular base tower. To grow a tower like this, you need to find some suitable aluminum cuttings. Don't use just any old aluminum that is in your scrap pile. Just as you use the best seeds for your tomatoes, you need to be selective about what aluminum you plant.

High quality 6063 tubing with a good heat treating is essential. Plant about one inch of tubing for each 10 feet of desired antenna height. Be careful to space the cuttings carefully as the spacing will determine the size of the base and therefore the ultimate wind load rating of the tower. You might just as well use two inch diameter tubing with quarter inch walls as the increased cost over smaller sized tubing is not significant. Spending an bit extra on the best cuttings now will result in a much stronger tower later.

Not only must you be careful about the spacing, you must also be careful about the orientation of the cuttings. If they are all perfectly vertical, you will have a straight sided tower. While a tower with angled tubing will be stronger, lighter and have less wind resistance, planting the cuttings at the appropriate angle is best left to the experienced antenna farmer.

We have gotten a bit ahead; proper soil preparation is essential. A year or two before you intend to plant your tower, you must begin to fertilize heavily. The best fertilizer is 6063 shavings. The heat treating is not important for fertilizer. 6063 shavings are assimilated better by the growing tower than larger pieces and their chemistry matches the chemistry of the cuttings. You can also use beverage cans, however their chemistry is not ideal. The high magnesium content of the tops can be a problem. If you have high rain fall in your area, experience has shown that high magnesium content is often not a problem because magnesium is lighter than aluminum, rises more quickly to the surface and is washed away by the rain.

Plan on using at least two pounds of your inorganic fertilizer for each pound of the antenna you want to grow. Some quick calculations will show that this is a large amount of aluminum. You can fertilize every day if you are in a hurry, but once a month for a year or two should be sufficient.

Be careful to get the inorganic fertilizer deep into the soil. If you merely scatter the fertilizer on the surface, root growth will be insufficient. There is no greater disappointment than seeing a 100 foot tower blow over in the first good hurricane. Roots that reach 10 feet into the soil are required for a tower that will withstand 100 mile an hour winds. However this means fertilizing to this depth. It is difficult to fertilize that deep, but you can readily appreciate the benefit of doing so.

You might also consider adding calcium to the soil as your antenna grows to form a concrete like base. A good source of calcium is ground up, very fine, oyster shells. A significant amount of oyster shells are required, so this is a possibility only for people who live near the oceans. Clam shells from fresh water, for some unknown reason, do not provide as strong a base as one grown from oyster shells. This might be an interesting research topic.

With good fertilizer and good growing conditions, you can expect to grow a 100 foot tower in about five years.

Growing steel towers has been attempted with disappointing results. As with other plants, rust is a problem. The difference in cost of growing an aluminum tower as opposed to a steel tower is small so you might as well grow aluminum. Titanium is also a possibility.

Growing antennas, as you can imagine, is considerably trickier than growing towers. The problem is in the seeds, fertilizing considerations are the same. To grow a beam, you must first construct a small model of the antenna. An error of a few thousandths of a millimeter in the seed will have an adverse effect on the resulting resonant frequency, gain and overall pattern of the beam. Getting the gamma match correct is a very challenging problem. Growing antennas is best left to the experts.

So there you have it. If you are willing to expend some considerable amount of time and effort fertilizing your soil, are careful about the cuttings you use and if you are willing to wait a few years, you can grow outstanding towers for very little cost.

About the author:

Mark Kachel was first licensed in the late 1950's as KN9AAZ and then K9AAZ. He currently has an extra class license and his call is **NØØKS**. When interviewed about this article, Kachel said "Anyone can do organic farming. I thought it might be interesting to see what could be done with inorganic farming. It certainly does not require a green thumb."

The Traffic Hound by Pete K8OUA

Faithful readers of the Keynote will note that I've renamed this column. I want to move the emphasis away from the FISTS Slow Net to make it a general traffic column. Specifically, a CW ops traffic column. More specifically, a FISTS CW ops traffic column.

Let me start off with a statement that "I think that Email will be one of the greatest innovations to hit mankind in its history." OK, ok, that might not be that profound a statement, but Email has already changed the world dramatically within the past few years. Imagine what awaits us twenty years from now! Imagine the world of communications in only two or three decades. OK, so what's the point?

Everyone knows we're in the midst of a revolution. There will be dramatic changes to our lives because of this revolution. Well, I just want to state my feelings publicly, here. I believe that hams are using Email and the internet too much and too often, to the detriment of our great service and hobby. Oh, no, you say, not another Luddite eager to turn the world back to the 1950's or before! No, I don't believe I am a Luddite, nor do I want to turn the world back! Well, if I could I might, I'd love to be back in the fifties knowing what I know now, but with a young man's face!

No, I am a keen user of the internet, own three different Email addresses, and use two of them extensively. I have a hard enough time meeting Nancy's Keynote deadlines using Email to send these articles, if I had to do it by snail mail I'd never get anything published. But, I still believe that we hams are tending to use Email too often simply because it's easier. While it may be easier, other ways often serve our purpose better.

We had some birthday notices come through the FISTS Email list, suggesting we send an Email message to a member wishing him happy birthday. A great gesture and I'm sure he appreciated it. But did it really serve our purpose as an organization? I wonder how many of us even thought of using the National Traffic System by putting a message into one of our traffic nets wishing this member a happy birthday. Imagine what would have happened to the local nets if, say, fifty messages came to this fellow's address wishing him a happy birthday. This would have shaken up the net considerably. More importantly, it would have given traffic ops across the country practice that they certainly could use in forwarding and delivering traffic. Nor is this the only example of such an overuse of Email. Most of us receive Email messages that could easily have been sent via the traffic nets.

Yes, I know that sometimes you need to say things using more than just the twenty-five words that an NTS radiogram allows. Or, you may want the limited privacy that Email provides. OK, when that's the case, use Email! But, what about the times that require much less verbiage or privacy? What about the article you read in the Keynote that you thought was so great? Couldn't you send a quick NTS radiogram to the author expressing that sentiment? We just don't do that for some reason.

Many, probably most, Old-Timer hams have never sent a message to anyone using the NTS. Yet, traffic handling was the foundations upon which amateur radio was built. It is the reason our parent body is called the American Radio RELAY League. And even today in this world of technological magic, people across the country still receive warm and welcoming messages from local hams. What's that you say? You don't know how to do it? Well, you didn't know how to send Morse at one time either, but now you do.

How about trying this -- pick out someone, anyone, a friend or relative living across the country, a new FISTS member, or me! Find the person's address, and, if you can, his/her phone number. Write him a message of greeting. Doesn't matter what, just a message telling him that you are thinking of him. Then, put it into the system. What's that you say? You don't know how to find the address and phone number of the person? How about the internet? Go to Yahoo and search under "people search telephone". Put in the last name and city/state, and you may find out the individual's address and phone number. My address is Pete Kozup, K8OUA; Warren OH 44481; Phone 330 847-0975. Put it into a net and send it on its way.

Oh, you don't know any nets? Or, you're worried about flash traffic handlers and what they'll say to a novice? Well, bring it to the FISTS Slow Net, 3.682 MHz at 9.00 PM Eastern Time any Tuesday or Thursday evening. Give the message to me, and I will help you send it out, and I'm very gentle!! Sure, this is more complicated and fussy than Email but I can guarantee you that it's also more fun and satisfying. And, it sure as heck does a lot more good for the mode we love than sending it via Email.

Next month we'll talk a bit more about writing messages and getting them into the system. If you have the time, send me a message — I don't care what it says, and I hope to see you on the nets. 73, es ARF, Pete K8OUA (I love getting traffic too — My phone is 810-797-5388, street address 5450 Diehl, Metamora MI 48455 — Nancy Kott W28C)

AMATEUR RADIO LICENSE PLATE FEES

This report was compiled from data given to ARRL HQ from ARRL State Government Liaison volunteers.

STATE	INITIAL/RENEWAL FEE
Alabama*	\$ 3/3
Alaska*	\$ Free/Free -- General or above; \$20/30 -- Novice or Technician
Arizona	\$ 25
Arkansas	\$ 2 -- Private passenger vehicles only
California	\$21/none
Colorado	\$ 2/2
Connecticut	\$12/Free -- Issued for pass commercial, combination, camper or motorcycles; processing= 9 weeks
Delaware*	\$ 10/Free
Florida	\$ 5.00/1.50 -- Plus: service fee 2.50; postage fee 1.30
Georgia	\$20/free -- "Amateur Radio" listed on tag; Same cost as vanity plates; Fixed five year cycle; must at beginning and every five years; May to July only order period; Much more expensive than surrounding states; Fee also applies when license plates are remade every 7 years
Hawaii	\$10/5 -- Must apply through county Civil Defense office; Takes 4-8 weeks
Idaho	\$ 5/free
Illinois	\$ 3/free -- "Ham Radio" appears on plate Car, truck or motorcycle only; If driver has ham tags, may legally use a headset; special brochure available
Indiana	\$ 2/2
Iowa*	\$ 5/5
Kansas	\$ 1/1 -- Passenger or trucks; Same call sign/tag permitted on cars and trucks
Kentucky*	\$25/25
Louisiana	\$20/20 -- Renewal every two years
Maine	\$15/15
Maryland*	\$ 5/5
Massachusetts	\$20/20 -- Ham tag fee is half way between regular plate registration of \$20 and the vanity plate registration fee of \$70; Plates all expire November 30; Plate registration and vanity plate fee of \$70; Processing time is 8 to 12 weeks; passenger vehicles only (law pending to include other types of vehicles)
Michigan	\$ 2/free -- Novice operators not eligible for ham plates; Only people with ham tags eligible for a permit to own a ham rig capable of receiving police frequencies
Minnesota	\$ 10/free -- Can have plate on second car with "dash #"
Mississippi	\$15/
Missouri	\$20/20 -- Affidavit required stating that Amateur holds an amateur license
Montana	\$ 5/ -- SGL is state legislator; Ham tags issued only to "conditional" ; Tags expire Dec. 31
Nebraska	\$5/5
Nevada	\$25/free -- Plus usual registration fee
New Hampshire	--Plates not available in NH
New Jersey	\$10/free -- More than one car can use a hamcall (eg. W2WEC-2)
New Mexico*	\$ 3/3
New York	\$11/5 --More than one ham call can be used, but must be altered (KB1HQ-1)
North Carolina	\$10/ --Bills currently in House and Senate to raise the fee to \$10.00 each year
North Dakota	\$ Free/ Free
Ohio	\$ Free/5
Oklahoma	\$ 2/2
Oregon	\$ 7.50/free
Pennsylvania	\$ 20/free -- Request for multiple plates (WA3IAO-2) pending
Rhode Island	\$ Free
South Carolina	\$ 1/1 -- Deadline: July 1 and plate is valid starting Nov. 31
South Dakota*	\$ 2.50/2.50
Tennessee*	\$ Free/Free -- Must be a member of RACES or ARES; Proof of above is required; Multiple tags may be ordered (e.g. WA4VZQ, WA4VZQ-2, WA4VZQ-3, etc.) Tags say "Emergency" in addition to the call
Texas	\$ 2/1 -- Can have the same plate on multiple vehicles; Must have transmitting equipment in vehicle; Title need not be in vehicle; Plates available only for cars and light trucks
Utah	\$10/none
Vermont*	\$15/15
Virginia	\$ 1/1 -- Amateur equipment must be kept in the vehicle; Amateur must own the vehicle
Washington	\$ 6/free
West Virginia	\$ 5/ --All plates expire July 1
Wisconsin	\$10/free
Wyoming*	\$ 4/4

NOTE: Most states require a copy of an FCC amateur license as well as proof that tax has been paid on the vehicle. They also require that the title is in the ham's name. The license fees, in most cases, are in addition to the usual registration fee.

* The asterisk indicates that the information may not be up-to-date.

FISTS Spring Sprint by Pete Kozup K8OUA

The Spring Sprint saw some strange things happening! Almost every station that sent in logs complained about the conditions, and this writer was one of them. Conditions that day were not very good, noisy bands and signals that couldn't seem to bounce off the backyard pond, let alone the ionosphere.

I kept wondering, where are all the FISTS out there? Why aren't more stations participating? It seemed that the bands were noisy, but not with FISTS signals. Yet, if you accept these, how do you explain a winning score that doubled previous winning scores?

How do you explain a higher turnout of logs than in any previous Sprint? And, as usually happens, the comments by those participating were very favorable. It was another fun event that had 36 logs sent in from every call area except the 3rd call area.

Incidentally, to those living in God's country up north, this is a North American Sprint. VEs are able to send in logs too, you know. Perhaps one day I'll drive to the border, set up a rig and get some VE participation in the Sprint. C'mon gang, this is a fun contest, and it would be nice to get some Canadian logs in.

One neat thing that happened was that we got some good DX participation, and some DX logs sent in. Two Russian testers, Vlad UA6JD (FISTS #1385) and Victor RA3VY (FISTS #1110) both sent in logs, as did Les G3VQO. Thanks fellas, we need to come up with ways of getting DX FISTS involved more -- perhaps this should be a free for all like the CQ WWDX test in which FISTS from everywhere can work other FISTS from everywhere else. As it turned out, this is what happened, to the benefit of all.

OK, here are the results — no question at all about the winner — John, K4BAI, compiled an incredible 15,260 point total. His actual total was even higher than HE had figured, because he did not give himself multiplier credit for each DX station he worked. John had a total of 96 contacts for 436 QSO points on 15, 20, and 40 meters, with 35 multipliers!! Great job, John!! John's total score almost beat the combined scores of the next three places, and these guys were no slouches themselves.

Ed, N2ED (great call!!) in his first Sprint, scored a very good 6,399 points, with 51 QSOs for 237 QSO points, and 27 multipliers. Ed will be one of the ones to beat next Sprint if he can do this well on his first try.

Third spot goes to Dan, W8EQA, bringing Utah to the masses with a score of 4899 points. Nice result, Dan, especially considering that most FISTS are back east and a long way from you.

Special honorable mention to Brian, W8BL, whose 4628 points earned him a fourth place finish, to Josh, AE2L, with 4480 points for fifth place, and to Al, WA0FAX, whose 4324 points earned him sixth place.

Unfortunately, there were only two QRP entries, both of them from the great state of Ohio. K8OUA with 1300 points, and K8UCL/QRP with 376 points carried the banner for the QRPers. Where are the rest of you peanut whistle guys?

I've been acting as the coordinator for the FISTS Sprints since they started and have enjoyed it over the years. But, it's time to hand over the reins to someone else. Tom AC5JH will be looking after them in the future. Thanks to all those who have participated, and a special thanks to those of you who have sent in logs. Hpe CU in future Sprints. 73, Pete K8OUA

Comments: "Just returned home from vacation and missed the first couple hours . . . sure sounded nice hearing that 'CQ FISTS' " **K4TXJ**; "Worked most of the FISTS that I heard. QRO people . . . don't forget to listen extra hard for us little QRP guys." **K8UCL**; "This was my first entry and I had a great time. My biggest thrill was having Nancy, WZ8C, answer my CQ on 40m." **N2ED**; "Bunchafun! C U next time" **W8EQA**; "Was on 21058 and 28058 at 1800 and 1900 . . . what's the matter, no antennas for those bands, or just a case of the Solar Cycle Blues?" **AA9KH**; "Thought I'd send a log . . . just to show that we're listening . . . over here in Europe. Conditions were very poor . . . but thanks to the two guys who managed to pull me through the noise." **G3VQO**; "Sri I was such an eager beaver — starting early HI — forgot D.S. Time, but found out . . . and waited the hour." **W08E**; "My first contest with FISTS. I can only do better!" **N0OKS**; "My new CW filter made the difference this time, and I added 18 FISTS to my Century Award log. Thanks! **KQ6ES**; "Had very bad condx on bands at my QTH. Hope to do better next time." **WB2EXI**; "Nice little contest . . . called CQ in the 40 meter novice band for 15 mins. and gave up." **WA0FAX**; "Enjoyed my first sprint as FISTS member — conditions weren't that good . . . but worked almost every station I heard. Maybe outdoor antennas would help, HI!" **WA2VQV**; "Great contest — just the right length! HI HI" **KE4ZQD**; "I only had about twenty minutes to operate . . . but . . . here it is." **K8FN**; "Great sprint. I only got to spend 1 hour in contest. Had lots of fun though. Looking forward to Fall Sprint." **KF6DCU**; "Poor band conditions, 20 and 40 meters only bands open, but still had fun." **NEOC**; "Had a good time and worked 15 new FISTS members towards my second century award. I finally got a chance to work WZ8C, Nancy . . ." **WA2BQI**.

SPRING SPRINT SCORES

Call	QSO Pts	Mults	Total
K4BAI	436	35	15260
N2ED	237	27	6399
W8EQA	213	23	4899
W8BL	178	26	4628
AE2L	224	20	4480
WA0FAX	188	23	4324
NE0C	167	22	3630
UA6JD	124	24	2976*
AF4NC	183	16	2928
KT4KC	135	21	2835
N1PT	129	20	2580
WA7YY	138	18	2484
KQ6ES	154	15	2310
N0OKS	139	16	2224
K5JAZ	124	17	2108
WB2FXK	130	15	1950
KE4ZQD	114	14	1596
K5SO	112	14	1568
K8UGL	97	16	1552
WA2BQI	100	15	1500
WO8E	110	13	1430
K8OUA/QRP	100	13	1300
WA2VQV	95	12	1140
N1VWD	87	13	1131
AC5JH	86	12	1032
KC5GXC	81	12	972
AA9KH	72	12	864
K4TXJ	69	10	690
WB2EXI	72	8	576
KC6DCU	52	9	468
K8UCL/QRP	47	8	376
KB5VTB	37	8	296
RA3VY	31	7	217*
KE8SX	35	5	175
K8FN	15	3	45
G3VQO	15	3	45*

*Not all QSOs included at least one North American station.

Hints For Finding FISTS On The Air

by Bud WA2BQI

I usually operate after midnight, as I am working towards the new W.A.S. FISTS award, and I find that this is the best time to find new states and DX FISTS. I now have 36 worked and 36 confirmed by QSLs, through the FISTS QSL BUREAU. I also am working for many other awards and find this is a good way to get what I need, so I check each FISTS card when I get them for counties, prefixes, grid squares, ITU, and CQ zones. FISTS almost QSL 100 percent. As far as ideas on working FISTS members I simply call CQ FISTS on 7.058 and do alot of listening. I always hear a few standbys working this FREQ. and I usually jump in after they

finish there QSO if its a new FISTS for me.

The regulars that I listen to are **W6DDDB-CA**, **AC5GP-TX** and **WA4KQ-IL**. This gives me a big area for working new states. I guess you might say its not the SP method, but I call it working the piggy back method.

Hey, you never know, by calling CQ FISTS who you will work. I have worked a DL6, CM2, KP4-two QRP stations, a SSB dx station who switched over to CW and told me I was causing him QRM. I told him he should stay on CW and join FISTS instead of SSB QRM on our CW freq. HI HI.

I've operated CW now for 40 years, and sure hope CQ FISTS dose not sound like CQ DX by my fist.

You might start working contests, if you don't already. After you finish simply check the calls in your log against the lists that Nancy WZ8C sends in the KEYNOTE for members. I've picked up many this way. The best contests to work for this are MARC, QST SS, Field Day, CQ WPX.

I also check every QSO that I have against these call sheets, as you usually don't always give your FISTS NR out during an average QSO.

In the last 5 weeks I have worked 51 new members on 40 meters and have received 22 QSLs by the bureau, run by W8BL (nice job). Who says QSLING is dead? It sure isn't among FIST members.

The sure method of working new members is again simply calling CQ FISTS, and listen. I have worked them on all over the lower part of the 40 meter band. If you're interested in DX FISTS give out a call around 7.027 plus or minus. It is worth 2 points to get a DX FISTS.

The Novice band might be a good place as well because the old timers or elmers like helping the novices with the code, and you might find a few new members hanging around there. I find that for some reason Sunday night at around 0100Z - 0300Z is a great time for finding new ones on or around 7.058 khz. One night I gave out a CQ FISTS call and had six members come back to me at once. I worked all six one at a time, it was great, I thought I was in a DX pile up caused by me. HI HI.

Good luck working new members and hope to meet you on the calling freq for FISTS 73 Bud **WA2BQI**

FINAL

LATE BREAKING NEWS:

World Radio magazine is reinstating their CW Column, which will be written by Yours Truly! The CW column will be printed bimonthly, starting with Sept or Oct. If it is well received, it may go monthly. I am just thrilled about this and find it very encouraging, particularly in light of the apparent bias of CQ magazine. I urge you to support WR. Please take a moment to drop them a note or Email and let them know you are interested in CW and thank them for adding a CW column. Their address is 2120 28th St, Sacramento CA 95818. The Editor's Email is kb6hp@ns.net 73/88/33 Nancy **WZ8C** #0379

WAS RECORD SHEET

STATE	CALL	NAME	BAND	FISTS NUMBER	DATE
Alabama					
Alaska					
Arizona					
Arkansas					
California					
Colorado					
Connecticut					
Delaware					
Florida					
Georgia					
Hawaii					
Idaho					
Illinois					
Indiana					
Iowa					
Kansas					
Kentucky					
Louisiana					
Maine					
Maryland (D.C.)					
Massachusetts					
Michigan					
Minnesota					
Mississippi					
Missouri					
Montana					

Nebraska					
Nevada					
New Hampshire					
New Jersey					
New Mexico					
New York					
North Carolina					
North Dakota					
Ohio					
Oklahoma					
Oregon					
Pennsylvania					
Rhode Island					
South Carolina					
South Dakota					
Tennessee					
Texas					
Utah					
Vermont					
Virginia					
Washington					
West Virginia					
Wisconsin					
Wyoming					

Applicant Name _____
Address _____

QRP (5 watts or less) _____ OR
QRO (over 5 watts) _____

Callsign _____ FISTS# _____
ISSUE 7 1997

I hereby apply for the FISTS WAS Award. By signing below, I certify that theses contacts are legitamate two-way CW QSO's with FISTS members made in accordance to the rules and regulations of the FISTS WAS Award

Signature _____



KEY NOTE



Sec: E. (Geo) Longden, G3ZQS. 119 Cemetery Rd., DARWEN, BB3 2LZ, England. 01254-703948
Packet: G3ZQS@GB7HVU. E-Mail: fist1@compuserve.com or morseman@airtime.co.uk

OFFICES

QSL Manager: G0FRL. Bob Lowe
PO Box 190. BOLTON. BL1 4UL.
U.S. Rep: WZ8C. Ms. Nancy Kott.
5450 Diehl Rd., METAMORA, MI48455
PRO: G4YLB. J.A. Welsh
3 Minster Cresc. DARWEN, BB3 3PY
CONTEST MANAGER: GM4BAE
Northbrae, Brookfield Cresc. STRANRAER, DG9 0HY

NETS

Sunday QRS 0900 (loc) 3.575 2E0AJS
US 0100Z on 14058
Tues: G0IPX/P 1930 ON 3.558 (+/-)
Wed: US Net 0100z on 14058
Thurs: QRS 1900 (loc) on 3575. 2E0AJS
DX 14/21/28.058 on the hour for 15mins
Pse keep watch all Novice allocations
UK Net Controls use G0IPX/P

Up-dated listings may be obtained from HQ. SAE plus current stamp. **Lapel Badges**, £1.50 incl. **Fabric patches** £2.50 incl. **QSL Cards** £5.00 per 100 or £8.00 per 200 (UK and EU pse add 50p for p/p. DX members - on advice.

GREETINGS

Hi People. Thank you for your patience in regard to the missing 'June' Keynote. The cause of this of course was two weeks spent in the US and my attendance at Dayton.

Dayton itself was great. The weather was superb over the whole weekend and we had over 130 FISTS members signing in or joining. As usual, Nancy and her charming Mum put up a grand display on the booth. I arrived to find a redhead where I expected a blonde but otherwise all was as in previous years and it was a rare occurrence when the booth did not have a crowd of visitors chewing the fat.

During the weekend, Al Winkler conducted various forums one of which was devoted to the cry for a no-code licence in which Nancy and W5Y1 ran a head to head and viewpoints were expressed from individual members of the audience. I could have been famous here as the camera was focused on the founder of FISTS but unfortunately I had to exit for about 2 minutes for a breath of air and a drink of water so the only thing the camera saw was an empty chair. T'would have made no difference since the debate was a domestic one and it would not have been right for me to voice any opinion and though it must be admitted that although there was an expectedly large representation of the club present, the forum hall was only one third full and FISTS was a tiny percentage of all those attending Dayton so the small handful of folks who were pushing for a code free ticket could easily have been swollen to a majority if the feeling had been there. The day undoubtedly went to Nancy who spelled out the danger signal by dressing in a fiery red. Hi.

I bumped into G3TUX in the exhibitors lounge but that was the only time I saw him. Dunno where you were exhibiting mate because I failed to find any reference in the guide...

It may have been a surprise to many but there were a number of booths dedicated to CW including Vibroplex and the odd thing is that these traders with keys, keyers and other CW oriented goodies were never shy of interested visitors.

Charlie ran his usual station with (I think) a little more success than hitherto because of a different antenna arrangement but the 'slinky' still left a lot to be desired. As a contrast, Brian fitted a bug catcher to the rear end of his pickup and at the motel, we ran a TS520 with car batteries, connecting the antenna socket to the whip via a length of coax squeezed under the door. There was never a dull moment. Hi. Incidentally, testing this setup from the home location was causing Brian a few headaches until I pointed out that the coax would be better mated with it's receptor on the antenna than lying on the ground. It takes all sorts folks doesn't it?

Vibroplex dug up a prototype iambic which was passed on to Brian W8BL to 'sort out'. Viewing it, there seemed to be something wrong and I think that the first mistake was trying to support both paddles on a single fulcrum which meant distorting the "dash" paddle and having its lever run immediately above that of the dot leaving precious little space for weights. There

is no way that this or any other mechanical iambic is ever going to replace the iambic keyer and paddles which we have come to regard as standard but the concept is of interest and will no doubt continue to be so.

Brian and I left around noon on Sunday and predictably (according to him) the weather turned cold and murky as soon as we hit the Michigan border and we left Ohio still bathed in sunshine. Michigan is at least four and possibly six weeks behind the UK in terms of seasons and the fully clad trees which I left behind were replaced by straggly copies dressed in their underwear. I enjoyed many hours on the Corsair and worked well over 100 members during my stay. The Ford museum was a surprise. A string of past Presidents cars was on display and other Ford oriented paraphernalia as you might expect but there were also ancient railway engines and rolling stock, tramcars, horse-drawn buggies and fire appliances alongside some exceedingly rare amateur and general radio kit. I was transmogrified. Domestic and farming appliances, a complete coopers workshop, gigantic stationery steam engines with platforms for the public... well worth a visit if you ever get to Detroit.

After getting more and more sluggish over the past 12 months and particularly in the last 6 months, curiosity got the better of me and when the District Nurse came to take Ivy's BSC I asked her to take mine. It turned out to be in excess of 12.5 and I trooped off to see the plumber who confirmed that I was diabetic. I expect to be on some sort of pill after I see him again in a couple of weeks but having mentioned this on the air, I got two consecutive contacts who, in effect, said "welcome to the club". G0VTN and G4MSR are just the first and I would expect that there will be a far greater number than would have been envisaged.

FLAMES

With apologies to those who do not play on the internet, this is netspeak for a letter attacking someone. Seemingly, an individual WA6VSE, has been distributing flames calling for official investigation into the funds of both the ARRL and FISTS. He seems to think we are some sort of subversive organisations with political agendas and since he never sees a financial report suggest that the IRS (Inland Revenue Service) should take an interest. Hmmm.

AMATEURS DREAM

Received a super e-mail from Ralph, ZL2AOH concerning the Quartz Hill site near Wellington. The document included some photographs of the site but I do not have the expertise to isolate these for reproduction.

The QUARTZ HILL amateur radio station is on Makara farm, a mixed stock operation on the hills above Makara Beach, west of Wellington. Quartz Hill is designed for amateur radio DX and contest activities plus shortwave listening - on all frequencies from VLF through HF.

Until late 1996, Radio New Zealand operated a receiving station at Quartz Hill, listening in the medium and shortwave bands and providing material to State broadcasters.

Electricity Corporation of New Zealand (ECNZ) is the new owner and plans to eventually build a wind farm on the land. In the meantime, Wellington Amateur Radio Club Inc

corporated society encompassing Branch 50 NZART) has negotiated a lease with ECNZ to access the property and use the remaining former RNZ facilities for amateur radio. Quartz Hill features: 100 acres of antenna farm including longwires, vee beams and rhombic beam antennas. A purpose-built building that includes 5 operating rooms, 2 sleeping rooms, kitchen and bathroom with shower. Low levels of manmade RF noise. An elevated location (300m ASL) with good low-angle takeoff in all directions. Easy access. Only 30 minutes (max) drive from central Wellington city on sealed roads. A Quartz Hill User Group has been formed for amateurs or shortwave listeners who are interested in using the facility. Only members of this group may use the station facilities. The one exception is club-sponsored events, when any club member may use the facilities.

THE CLUB KIT PROJECT

Nancy includes the following info in the NA memo: Last month, I announced our Club QRP Project Kit. I was under the impression that the kit was going to be available at Dayton, but I never found out where the representative with the kits was located - or if he was there at all! Many FISTS came by our FISTS booth asking about the kit, so I know the interest is there. The kit, the NW series, is available from Emtech, 3641A Preble St, Bremerton WA 98312. Phone is 360-415-0804. Email is roygregson@aol.com. It is available in your choice of 80, 40, 30 or 20 meters. The 80 and 40 meter version include coverage of the Novice bands. Features include: tuning from a 8:1 vernier variable capacitor, variable bandwidth crystal filter, full smooth QSK, internally adjustable sidetone level, full QRP gallon, internally adjustable down to milliwatts, and features a FISTS logo on the front. The painted/silkscreened cabinet is 6.5" x 2.5" x 11 and 5.5"D. The price to FISTS members is \$120, including cabinet, hardware, filter and shipping. Specify which band you would like. For EU members interested, there will perhaps be additional shipping charges. Suggest you ask first either by e-mail or phone.

NANCY AND THE DEBATE

The Debate about "should there be a CW requirement for HF privileges" against W5YI was a big success for Our Side! I had many people come up to the booth on Sunday, say that they saw the debate and wanted to join FISTS! W5YI told me the next day, that it was the "biggest blow to his ego that he's ever had" - all day long people were coming up to him and telling him how they disagreed with his anti-code requirement stand. I want to give a big Thank You to Peter O'Dell. Peter is a FISTS member and a hypno-therapist. I called him and asked him if there was something he could do for my stage fright. He did a session of some stuff called NLP with me over the phone. It's not hypnosis, but a "positive thinking" imagery type thing. The results were amazing! I was filled with confidence and didn't hardly even have butterflies! Peter has code tapes using these principles - I can't vouch that they will work as well as the NLP did for my stage fright, of course, but they would be certainly worth looking into. His address is Alternative Arts 261 9th Street South, Naples FL 34102 (800) 425-2552.

MEGS

GM4HYF reminds me that he has been sending computer generated practice Morse in the form of "speedruns" under the GB2CW banner for over a year now at speeds of 15, 18, 20, 25, 27 and 30wpm on a frequency of around 3257KHz from 2045 to approximately 2230 local time each Thursday evening. Free cassette tapes of practice Morse are available to all FISTS members and they find that they are being asked for the tapes more and more by operators who wish to increase their reading speed and not just to candidates for the 5 and 12 wpm Morse tests. Many such requests are for speeds of 20wpm and up to, to take advantage of this service, please SAE or adequate return postage in stamps and a blank C90 cassette tape with a note of the speed and type of practice code required (PL & QSO, QSO

only, PL with or without punctuation symbols, groups of numbers etc.) with the cassette to GM4HYF. Geo. M. Allan. 22 Tynwald Ave, High Burnside, Rutherglen, G73 4RN. George also appends his phone number which I assume is OK for publication as 046-6344567 (should this not be 0141 ??).

LAST SUNDAY LADDER

GS4LHI	19	38	0	310	348
GW0SGG	18	36	1	281	318
G0MGD	22	44	7	166	217
G0TBD	8	16	0	201	217
G4OOS	10	20	0	180	200
G4PTE	11	22	2	127	151
G0MRH	6	12	1	137	150
G0FVS	7	14	0	104	118
G4RBE	3	6	0	64	70
GW0PXQ	11	22	0	47	69
G0VBH	6	12	0	12	52
G0WAS	9	18	3	10	31
G14CBG	7	14		14	28
G0VCY	1	2	0	24	26
G0PEH	2	4	3	10	17
G0IFX	8	16	0	0	16
G0ATR	4	8			8

As of 8/6/97

Again, at the top of the rankings 4LHI has produced quite a margin over Bill, GW0SGG but as has oft been pointed out, things can change w/pdq with a table of this nature.

LETTER FROM SWL

As an eleven year old boy John (GSWL3) was fascinated by Morse and Radio in general. He strikes a chord with yours truly who also "dabbled" at the same age.

"I was very interested in the Morse Code due to a neighbour; an old lad called Billy Reid. Billy had been through WWI and when he was demobbed he got a job with the Post Office as a Telegraphist. In those days, Wireless was just getting into it's stride and Billy loved tinkering with bits and pieces of radio equipment and he taught me to build a "straight three", a battery set with a 120v battery, grid bias and a 2v accumulator. With a speaker and 75' aerial, I was able to pick up Athlone in the South loud and clear whilst a neighbour with a 6 valve superhet could not receive it as well as I did. She wondered how I could get such a good reception from a bundle of bits which could be picked up very cheaply in Belfast's Smithfield some 25 miles away.

I learned the code and on the old set which I built with Billy's help could hear a neighbour tuning in next door. I would get a series of oscillations and that gave me an idea. I had made a Morse key of sorts and connected a wander plug from one side of the key and tuned in to Athlone. When the reactance was too great, my set broke into oscillation so I tuned past Athlone to cut out the sound and hey presto! I had a ready made oscillator. I connected the positive of the HT battery to the receiver via my wandering lead and keyed out 'CQ CQ CQ de Johnny Murray. Are you receiving me'. Not the way to do it of course but I was having fun and in the middle of my keying came a knock on the front door. When I opened it, there was old Bill with his glasses perched on his brow. "Are you mucking about with Morse Code?" he asked and I was delighted to tell him of my great idea. "You will have the Post Office sending someone to investigate" he said and I was astonished to say the least. How on Earth did you know I was "Morsing?" I asked. He said he had picked me up on his receiver which I could not believe so he told me to go along to his house (three doors away) and listen to his set whilst he sent a short message. Bill was a 30wpm man and I would not be able to read his transmission but he said "I will send slowly 'What sort of sweets does your best Girl prefer' and when you know the message you will be able to follow it". I couldn't get down to his house quickly enough and for a minute or two nothing happened and then, loud and clear, the Dits and Dahs came. I was over the Moon. Billy again warned me that I was breaking the law though I did try to contact a pal who lived about half a mile away but nothing

could be heard.

I managed to get another school chum interested in learning the code and he and I together with one or two other chums, went along one night to a spot called The Bankheads. It was a large grassy place sloping down to the shore and I gave my chum a copy of the code and a torch. I sent him to a spot about 50 yards away after explaining that I would flash a message to him and he was to acknowledge each letter by waving his torch. It took about half an hour to complete the message in this manner. My chum when he left school got a job on a boat sailing between Larne and Preston and in years to come I was to meet him as Captain on Ocean Liners. Knowing the Code was part of the test to acquire his Masters Ticket,"

John's story rings many bells with me though he does not appear to have succeeded in depriving his neighbours of power as I did when, whilst tinkering with the local DC supply, I blew a common mains fuse that protected our own house and three others. Hi.

John. The database is constructed around callsigns and in the absence of such, SWL is used instead. GSWL for UK, DSWL for Germany etc. We append a number (GSWL3) to make that field unique.

NEW MEMBERS

2859	HB9ZE	Frank	2860	G4UCJ	Sean
2861	GW4SDO	Dave	2862	G0AZH	Jerry
2863	G4YZO	John	2864	G6QA	Lynda
2865	G3JNZ	Jack	2866	GSWL3	John
2867	G7MGV	Bob	2868	G0UIW	Tony
2869	G3AQF	Harry	2870	M0AKN	Gordon

QRS NET

The Tuesday evening run presided over by Bill, GW0SGG, is firmly established. There is a regular turn out of a group of stalwarts and often enough some odd visitor or two surfaces. Recent visitors drew attention to contests and felt it improper that the Club Officials were excluded. This is not so Bill, all officers and committee members are free to take part in any club activity. I think you are being misled by my own reluctance to partake actively in the Last Sunday, Straight Key Week etc. but this is because I cannot guarantee to sustain activity and apart from that, I feel I would have an unfair advantage being HQ station. I am happy to dish out points of course but I am so busy with general FISTS business that I could not be sure of maintaining such activity.

LEICESTER CLUB

Dear FIST members,

LRS is one of the oldest radio societies in the UK (formed 1913) and now requires a move to newer premises with better facilities for training and operating - ready for the next millennium.

We have negotiated a series of discounts with hotel groups and car rental companies within the UK. Anyone who needs to hire a car or book hotel rooms within the UK could benefit from our card and make savings - up to 35% on car hire.

Companies currently with us include Avis Rent A Car Ltd, Hertz (U.K.) Ltd, EuroDollar Rent A Car, Stakis Hotels, Wayfarer Inns and Jarvis Hotels.

Together, these excellent companies offer a superb range of accommodation and vehicle hire possibilities.

It is not necessary to be a licensed Radio Amateur in order to obtain a card - it is available to anyone, anywhere around the world, or within the UK. Some Car rental companies are also offering discounted rates within the USA and Europe.

Every card sold increases funds available for new premises, equipment and training.

As the cards are taken up we expect that other companies will offer discounts, broadening the range and type of savings that can be made - these will be updated onto our new web site. Anyone / any company wishing to offer further discounts are welcomed.

The discount card has been priced at £10 (Sterling) and can be obtained using a Mastercard, Eurocard or Visa credit card (Cheques are too expensive

to handle unless they are Sterling cheques or drawn on UK cheque accounts).

We intend that this modest outlay is recovered very rapidly as bookings, and consequent savings, are made.

Our new website is well under way and contains details about LRS, its members and what we are hoping to achieve.

An order form for the Discount Card is included and can be printed off, completed and posted to us here in the UK. Subscribers should allow 28 days for delivery.

Check out - <http://www.foobar.co.uk/dialin/silver/lrs>

We are NOT a commercial company - we are a reputable Amateur Radio Society with ideas for the future. LRS seeks to further Amateur Radio in general and all monies raised will be used to this end.

John Alexander

Please direct any enquiries to me, John Alexander, via snail-mail, fax or E-mail at the above numbers / addresses.

Anyone requiring hardcopy text on LRS Letterheads can be supplied with these via standard mail or fax upon request.

With regards

John Alexander / G7GCK LLB Hons, BSc Hons
Leicester Radio Society

Morsum Magnificat



Samuel F. B. Morse
1791-1872

For news of what's happening in the world of Morse, read "MM"!

This unique bi-monthly magazine carries a wide range of articles on all aspects of Morse; past, present and future. If you like Morse, you'll like MM

By postal subscription only. Send for a sample copy £2.50 (US \$5.00 bill) or ask for further details from

G.C. Arnold Partners,
9 Wetherby Close, Broadstone,
Dorset BH18 8JB, England

EDGWARE SK EVNG

This annual event has always been well supported by FISTS members so we are looking ahead a little to Friday, 19 Sept from 1900z. The QRG is in the vicinity of 3560 and as usual, they attempt to mount special stations. Look out for GB2SKE, G3ASR and possibly G4UIZ/P so get the dust of the straight keys of yours and join the fun.

SHADOWS OF TITANIC

GW0LTU sends a photo copy of an article from the Western Mail.

"When Arthur Moore told his father he had picked up the SOS distress signal from the doomed Titanic he was reprimanded

Moore senior dismissed his son's claim and realised he had again spent all night fiddling with his multifarious radio equipment.

For years he had implored his son to be fresh and alert for the early morning starts at their family run watermill at Geligroes near Blackwood. And why should he have believed his son's outrageous statement? After all, the Titanic which was in the middle of its maiden voyage across the Atlantic was considered unsinkable.

As the day progressed, word of Arthur's outlandish story spread around the village and the young Mr Moore, then in his early 20's was probably the butt of a few jokes.

But two days later, after the Titanic sank in mid-Atlantic in April 1912 with the loss of 1,523 lives, the news of the tragedy was officially cabled to London from New York. Arthur Moore's claim that he had received the SOS signal more than 1,000 miles away on his wireless equipment installed in the mill had been vindicated.

His exploits reached the press and soon he was taken on

board by a suitably impressed Guglielmo Marconi at his Marconi Wireless Telegraph Company."

An impressive model of the Titanic has been received by the leaders of Caerphilly County Borough Council when Howard Moore was present. Howard, nephew of Arthur who died in 1949 declared that the family was extremely proud of his Uncle's achievements saying that he was at the forefront of wireless telegraphy at that time. GW0LTH tells me that the mill is home to the Blackwood ARC with the special callsign GB2GGM (Gelli Groes Mill) which was last on the air 11 May.

FACTOR QRM

G3KEF (Tom) reports on the interference being suffered on 14058. My earlier information placed the offending station in the Azores but monitoring this traffic, Tom finds KD1RA (a mailbox frequently accessed by CU3BJ) comprising long lists of gear for sale including prices. KD1RA also forwards to other mailboxes in the US and blatantly ignores cw already in progress. 14057.85 finds VE3HKK and K1LMJ also being logged several times in live QSO with CN8CG. Also lots of call-ins from various stations including NIURA and K1LMJ whilst CN8CG frequently calls in and leaves traffic with K1LMJ. Tom surmises that the main root of the problem is US stations and if these could be shifted, then the problem would probably end. Wonder if the US contingent could do something about this via the ARRL?

concerned, it lies outside the spectrum set aside by the bandplan but seemingly the Azores is a law unto itself. G0VQA. Julian has an interesting ob here since last year he was operating 80m on a G5RV/2 via a 'T' match ATU. Not as good he confesses as his current 80m quarter wave long wire via a home brewed 'Z' match and he is also contemplating tests with a home brewed mag loop. G0TBD. Terry is now also active /M and would welcome QSOs with fellow members. QRV between 3.550 and 3.563MHz but hastens to add that he has not yet perfected the dangerous art of sending and driving at the same time. From out of Houston, Brian and I logged a member doing just this with 16 wheels and I logged a returning FOC member who was doing it on the back roads having become bored with the challenge offered by the freeways..

G3TUX

The QRP Component Company

Stockists of Keys (Bencher, Jones & Kent)
Used keys of all types bought and sold

Shop now open. Export a pleasure!

7 Kings Rd, HASLEMERE, GU27 2RF
Phone: 01428-641771 Fax: 01428-661794

The Insect Filter

A variable bandwidth filter with a very narrow bandpass. Ideal for weak signals and poor band conditions.
S&E for further details and special FISTS prices to:

S. Dodson.
G3PPD

The Haven, Lound Rd.,
BLUNDESTON, NR32 5AT
Tel: 0502 732322

THE STRAWBERRY BASKET

G0STR. Hi Bill. You will find more details of the kit in question within this month's letter. Bill is off to Gran Canaria (EA8) and the holiday chalet will be home to his QRP rig mainly on 40 and 20 metres. G0UKX Last years heart attack with bypass and Teflon patch on his ticker (does this make it a non-stick heart?) curtailed his operating for a while but he is now back on air and to avoid undue strain, will be working strictly rubber stamp style. ZL2AOH. Our prolific Ralph has completed his application for the Keyemans Club of Japan award. Matching stations with prefectures was no small undertaking and aside from DXCC mixed and CW it is the only award he has tried for. Would like to include the Century amongst his targets but K7WF has thus far been his only FISTS contact. He estimates 350 years at this rate. Ooooooh. GW4GCB. Peter has been 100% cw for the past 12 months mainly with his pal G4GBG and he plans a make over job on his antenna this year. Also has an eye on home brewing but her he talks of beer and not necessarily radio. Nowt wrong with that Peter. A most noble ambition! G0JZU. Ross was happy to work GB0ARM which provided him with more satisfaction than the 'Windmills on the air' event which appeared to be conducted exclusively in SSB. And, less than half a mile away, one of the latter was operating from a disused windmill. Grrr. G4BWJ. Harmonic was not invited to extend his 12 year commitment with the RAF and was only a small cog in the 10,000 comprising the tradesmans wheel. After the Minister responsible for the mass shedding lost his job, harmonic noted 'it couldn't happen to a nicer guy'. Has he removed tongue from cheek yet? EA3FWE. Jordi is henceforth recognised as EA3WC. A shorter title of course and I resist the temptation to offer a comment which may not be understood. Hi. G0ILN. Hi Richard. The stuff you hear on 14080 (actually nearer 14079 though it is wide band) is not RTTY but a pactor, mail box. As far as we and most other countries in the world are

NOVICE ACTIVITY

I have had a suggestion that a limited version of the Century award (50 points) be made available for our Novice members bearing in mind a restricted frequency span and QRP. Actually, this would not be necessary if more of you were to scan the Novice bands periodically. I usually take a quick shift up there myself when on 80m and put out the occasional CQ but find myself at the mercy of conditions. When the band is 'long skip', any Novice stations have to be local but this is still an excellent way of spreading the Gospel. 3770+ seems to be used also by a number of late G0 stations though it is often frustrating to find high speed cw activity mainly from Germany but also from other EU countries presumably running QRO.

ODDS N' ENDS

Found G3TTH and learned that the Leicester Club NFD station boasted no less than four FISTS members.

GW0SSG asked me for a listing on disc before I left for Dayton. This I did (on the very day before I left) but they never arrived at their destination. I suspect this is a rare event but something has gone sadly wrong because whenever such packages are sent through the post, they carry a sticker complete with return address warning that the package contains sensitive magnetic media.

If any members heard me at around 2100 on 80m on the 18th July, I apologise for my seeming lack of good manners. My patience is no more nor less stable than most people but struggling to copy a QRP signal who was barely above the noise, I was constantly harangued by a E. European station who called me consistently over the top of the QRP station despite the KN which should have told him that I was listening for a reply from the nominated station. I called him a lid and made it plain that I would not QSO him or any other station displaying such poor operating techniques. I was somewhat ashamed of myself afterwards for allowing myself to crack but there is surely a limit to any-ones patience.

Tammy's sensitive hooter came into good use when he was clearly fascinated by something in the clover speckled grass. It turned out to be a soft plastic purse cum wallet and I thought Wow... this is the day. I retrieved it, opened it up and surveyed the contents - just the remains of a blob of chewing gum, a large gap where a seam should have been and some six inches away, a lonely one pence coin. I pocketed the coin without a twinge of conscience but I still dream of the 10% cut when I find £10,000 in a paper bag. Like my visions of a one metre square steerable beam with 60db gain in the chosen direction however, the smoke has not yet settled. Hi.

73/88 people.. stay sober de Geo

FISTS CW CLUB

The following list is in two sections,
one as NORTH AMERICA and the
other as UK-EUROPE-ASIA

Edward C. Hayes, N7CFA
2628 Lilac St., Longview WA 98632
n7cfa@tdn.com

NORTH AMERICA CARIBBEAN AREAS CENTRAL & SOUTH AMERICA MEXICO, HAWAII

KF5	A	JAMES	1919
WR4	A	HERB	3078
NC0	A	CHUCK	3365
K7	AA	RAY	2093
KK7	AA	MELISSA	2181
K1	AA	NORM	3236
KA5	AAE	JIM	3257
K9	AAU	BOB	2747
KB8	AAX	TONY	3289
KG9	AB	STEPHEN	2617
XE1	ABE	HUGO	3448
N8	ABR	FRED	1470
AH8	AC	JOHN	1259
AB2	AC	CAROL	2081
K7	ACK	FRANCES	3097
K2	ACW	GRANT	2573
KD7	ADK	GEORGE	3017
N2	ADP	JOE	3118
KN6	AE	SMOKEY	3128
W6	AEJ	BOB	3202
WD4	AEV	DWIGHT	3105
KE1	AF	ABEL	2954
W8	AFI	ED	2991
N5	AFV	ALLEN	2168
K1	AG	BILL	2728
AD6	AG	MIKE	3242
KE4	AGT	JIM	1581
WA2	AHH	PHIL	1988
K4	AHM	LEARD	1550
KC8	AHR	ALEX	2983
AE4	AI	DANNY	2444
K9	AI	VIRGIL	2532
N7	AJ	DON	2786
K8	AJD	KEN	2544
KF8	AK	MICK	3060
KA7	AKK	BETH	2084
KC4	AKQ	OSCAR	2015
VE7	ALL	CLINTON	3066
W9	ALM	BILL	2163
AB0	AM	PHIL	2364
AC5	AM	BOB	2516
VE6	AML	HAL	1930
KA8	AMX	TRISH	1453
K8	AN	RALPH	1484
WA5	ANF	DAN	2908
VE3	ANI	ALFIE	2755
K5	AO	PAT	2138
N3	AO	CARTER	2367
W0	AP	MAC	1908
KI8	AP	GREG	2985
K5	APB	JOHN	2107
WB8	APR	JOHN	3126
KP4	AQC	PEDRO	2548
KB7	AQD	ROBERT	3478
KC8	AQJ	BARB	2376

Membership Roster 7/2/97

KB3	AQL	LEE	3235	KC8	BOJ	ED	3391	TI5	CMA	CARMELINA	2556
W6	AR	DEWEY	3436	KB2	BOY	STANLEY	1598	K4	CMH	JIM	3094
K1	ARO	RICHARD	1580	AB2	BP	CLARENCE	3008	W7	CNL	JACK	2631
WB2	ART	KEN	3456	KA1	BPH	RICH	3169	K0	CNS	RICK	3370
K3	AS	BILL	2164	WA2	BQI	BUD	2009	N1	CO	BILL	3119
AC4	AS	JIM	3321	KC8	BQN	JAKE	2663	N3	COR	DON	3221
W9	ATE	JACK	2523	KM4	BR	RON	1593	N8	CPA	STEVE	2904
KC2	AUH	HARRY	3085	W9	BRD	RODNEY	1782	WB3	CPG	BRUCE	2340
WB8	AUJ	JOHN	3300	KJ7	BS	MARK	2972	N7	CPP	BRUCE	2075
KB4	AUK	GARY	2779	KC8	BSC	AL	2069	K4	CQ	EVERETT	2942
KB1	AUM	SHEILA	1599	WD8	BSG	DON	2737	N8	CQA	BUCK	2609
KF4	AUM	JOHN	3088	K8	BTH	WAYNE	1465	KM5	CS	WATT	2559
WB0	AUQ	BOB	1905	N3	BTM	JOHN	1574	VA2	CS	CORAL	2579
WA9	AUW	BILL	2066	KC5	BUB	CHARLENE	1749	WA3	CSF	JOE	1271
AA3	AV	EUGENE	1220	N4	BV	BOB	2640	WL7	CSJ	CHUCK	3214
KU4	AV	DICK	2731	W2	BVK	ED	2495	KE6	CSL	TOM	2637
KM5	AV	SCOTT	3042	KC8	BVS	HAROLD	2091	KF6	CTA	DICK	2643
VE7	AVC	VIC	1742	N2	BW	BARRY	2591	KE6	CTI	MATT	3371
KB3	AVS	CHARLES	2480	N9	BWG	DON	1015	VE7	CTW	KEN	3138
K4	AVX	JOHN	2307	W7	BWI	LOREN	2475	W5	CTZ	HARRY	3239
AA3	AW	DANNY	2482	KB2	BWO	AARON	3145	KC8	CUD	STEVE	2986
KU4	AW	BEN	2674	KS4	BX	ROGER	1403	N1	CUR	TED	3168
W0	AW	GARY	3310	KB1	BXE	MARTIN	2443	W3	CV	SCOTT	1502
KP4	AWI	ERNIE	3302	KC8	BXK	STEVE	2917	K8	CVC	BOB	3324
KB3	AWR	FORREST	3425	WB2	BXO	FRANK	2314	KA8	CWH	JOE	2979
K5	AX	TOM	2996	WD6	BYH	ROBERT	3170	WP6	CW	DOUGLAS	1771
KG9	AX	RON	3296	W9	BYH	BILL	3394	W3	CW	BOB	2491
WD4	AXJ	MARTY	2668	N7	BYP	PETE	3410	WA6	CW	ROB	3293
KI0	AY	CHUCK	2414	KA9	BZM	BILL	2409	K5	CWR	FRED	2570
N8	AYQ	JIM	1230	WZ8	C	NANCY	0379	N6	CX	GLEN	3263
AE4	AZ	RAY	1561	WR9	C	RON	2711	N8	CX	ALAN	3301
KC8	AZZ	PETER	3314	WB8	C	RAY	2739	W8	CYG	JOE	1471
NC2	B	MARTY	1028	WJ0	C	JIM	2910	KI8	CZ	TOM	2360
WB0	B	LARRY	2916	WN3	C	MAC	2932	N3	CZB	LOU	2392
KX8	B	CHUCK	2987	NE0	C	KEN	3014	WA4	CZK	GARLAND	2783
KR1	B	BOB	3442	WC6	C	CHUCK	3360	K0	CZU	DWIGHT	2430
KC8	BAA	JIM	2938	NN6	C	MIKE	3443	NU7	D	RANDY	1796
WA0	BAG	DINK	2960	NL7	C	JIM	3452	WB2	D	PETER	2071
K4	BAI	JOHN	2158	WB4	CAW	NATE	2664	AF7	D	BILL	2690
KC8	BAP	ROB	2931	K6	CB	CHRIS	3471	KC4	D	BILL	2709
KE6	BAZ	BUD	2998	KA3	CBC	ERNEST	3230	WN7	D	DON	2759
KE1	BB	FRED	1536	W9	CBT	DICK	3417	KC8	D	DENNY	3132
KB1	BBI	LOUISE	1985	W9	CC	LARRY	1714	KK6	D	DOUG	3187
VE1	BBW	DAVE	2919	WB1	CCG	DONNA	2310	WW8	D	TOM	3264
AB2	BC	JIM	2526	WL7	CDC	DOUG	2437	VE3	DA	AL	2757
W2	BCH	JIM	2487	KD4	CDI	SAM	2994	KG8	DA/	XE1 GEORGE	1473
K2	BCL	GAIL	2438	N7	CFA	ED	1402	W8	DAN	DAN	3421
K2	BE	CARL	2581	WB0	CFE	CARL	3465	KA7	DBR	MIKE	1972
AB0	BF	JON	2474	VE3	CFL	CHARLES	3248	K3	DC	BILL	1902
KB3	BFQ	ERIC	1786	W1	CFZ	RUSS	0294	N5	DCF	VIC	2641
W1	BFT	CARL	1431	N2	CG	GEORGE	1006	KF6	DCU	DAVE	2398
AC5	BG	BILL	2598	W3	CG	NORMA	2034	W6	DDB	BILL	1525
W4	BGG	GATOR	3298	KC8	CHR	ROY	3047	KD4	DDI	PAUL	1512
KF4	BHR	JOHN	1991	K7	CI	JOE	1738	W8	DEA	DON	3470
N5	BI	GARY	2029	N9	CIB	RAY	1922	W7	DER	ART	2023
KG2	BI	WARREN	2671	K1	CIK	KARL	3422	W9	DEW	DON	1406
KB1	BIC	RICHARD	2059	WB9	CIS	JOHN	0531	KU4	DF	KERRY	2959
WA8	BIJ	VINCE	0905	K3	CJQ	TED	2177	K6	DF	DENNIS	3076
AA9	BJ	TOM	2601	VA2	CK	GARY	2578	N3	DF	NEIL	3328
W2	BJ	BARRY (DA2BM)	2701	W8	CK	CRAIG	3367	N2	DFT	GEORGE	2741
VE7	BKC	TREVOR (VE3BMC)	3033	KA8	CKL	MEL	1768	K7	DFW	ROLYNN	1983
W8	BL	BRIAN	1221	K3	CKO	BOB	2483	AA1	DG	ROGER	2971
N4	BM	BOB	2587	WD6	CKT	GARY	2484	KC1	DI	DAVE	1210
K6	BM	STEVE	2973	W1	CKV	FRED	2745	N8	DIX	STEVE	1710
VE3	BMC	TREVOR (VE7BKC)	3033	WL7	CKX	PATRICK	2050	K9	DIY	MILL	2798
W7	BMI	BOB	3144	VE3	CKX	DOUG	2900	NP2	DJ	DEBBIE	1489
KB3	BMT	JAMES	3185	K1	CL	CHUCK	2077	KP4	DJ	WILLIAM	1576
W4	BMW	BOB	1539	W3	CL	CARL	3477	KC9	DJ	HERB	1745
KJ5	BN	GORDON	1503	WP4	CLS	MILLIE	2541	N0	DJD	SID	2435

FISTS CW CLUB

Membership Roster 7/2/97

WB7 DJR CARL 2004	KE1 EJ GLENN 2784	KK5 FO WAYNE 2447	W6 GSE ED 3107
N5 DJY LON 2320	KM5 EJ JD 3393	KM4 FO DWIGHT 3316	KN2 GSJ GEORGE 1538
N6 DK DICK 3395	WD4 EKB DAVE 3000	W4 FOK JIM 3272	K7 GT GRANT 3222
N0 DKE PETE 2037	WA1 EKR FRED 2743	K4 FOM ARMON 2010	KD4 GTM KAREN 2407
KE6 DKH WILLIE 2720	KI5 EL FRED 1229	AA8 FQ FRED 1495	W1 GU MICHELLE 3438
K5 DL JOHN 2768	KT4 EL WALT 3165	K7 FQ MIKE 2794	K1 GUG DICK 2965
VE3 DLH JERRY 3292	N2 ELW LARRY 1469	VE3 FS BILL 1240	KF6 GUH BECKY 2961
N0 DLJ DAVID 1419	AA0 EM JOHN 2094	N3 FSC GREG 2044	W0 GV GERRY 1931
K5 DMC JERRY 2571	W6 EMD DAVE 2095	WB4 FSF BONNIE 2975	VE7 GVC CAVE 3238
WD9 DMM MATT 1412	W6 EMT ROY 3249	W6 FU KEN 2193	K2 GVC WILLIAM 3243
WB5 DMM NEIL 1942	K8 EN KEN 0927	KF9 FU CARL 2362	K6 GVG TOY 3026
KF4 DNL AL 2577	AD4 EP GEORGE 1754	KP4 FU VIRGIE 2540	N0 GVV BILL 2676
N1 DNM GEORGE 1445	KF9 EP ERIK 3217	W0 FU TIM 2574	KB9 GVV BOB 3290
W8 DO DAVE 2512	KC3 EPA AL 3101	WB2 FVE CRAIG 1510	KC5 GXC LAWRENCE 2032
K2 DO DIANE 3330	KC7 EPD SAM 2521	WA2 FVL JOHN 1585	VE3 GXU DUNCAN 3092
K7 DOE PHIL 3277	AB5 EQ MEL 2492	K4 FW AL 1926	KA9 GXZ FRITZ 3054
N7 DOH PAUL 3457	W8 EQA DAN 2469	NP4 FW HECTOR 2531	KE4 GYU GUY 2649
W3 DP DICK 3464	VE7 ERA OLIVE 0743	KC7 FWZ TERRY 3204	N4 GYX DOC 2070
KF4 DPS JIM 3447	K1 ERB WAYNE 3109	N2 FX BEN 1011	KF9 GZ MARK 2400
WB8 DPZ MARV 2323	W3 ERU WES 2099	WB2 FXX JACK 0918	W0 GZ GENE 3052
K5 DQ PEGGY 1921	KQ6 ES JOHN 2406	W8 FYO BILL 1248	KA0 GZO ROB 2336
WA4 DQU KENT 2449	W2 ESX JOHN 1565	KA4 FZI PHYLLISAN 1767	WK1 H ARNIE 1027
KB8 DRQ DAVE 2477	WD4 ET JEFF 2769	KA0 FZW RAY 2604	AF9 H PATTI 1785
WD9 DSP SHARON 2772	K1 ETN AUSTIN 2072	NS2 G HELEN 0393	NN2 H KAY 2424
WD4 DSS FRANK 1994	N6 EV PAUL 1407	WI2 G ANNE 3143	NS2 H DICK 2508
KM5 DT BEN 2128	AE4 EW TERRY 2653	WW2 G WENDALL 3177	WT3 H MARK 2614
KO6 DT BILL 2421	KQ6 EX BARNABY 2707	N6 GA CAM 1920	KB4 HAH GENE 3423
AC4 DT NEAL 2993	WB2 EXI JOHN 2760	N8 GA GARY 2385	N3 HAM JERRY 3402
AA3 DU MICHAEL 1400	WB1 EYE CARL 2629	N2 GA GEORGE 3313	KF4 HAW DAVID 2726
N3 DU TIM 3368	N3 EYM BILL 0655	WA1 GAG TOM 3278	KE4 HBE PAUL 1923
KB7 DUG KEN 2672	K8 EZ RANDY 1718	K5 GAT KEN 3069	WB1 HBE JOHN 2061
KC5 DUI BOB 1534	WB2 EZG VINCE 0315	W7 GB DON 2108	N3 HBJ GEORGE 2780
W3 DV WOODWARDVILLE 1975	WA0 F MARK 1736	KE4 GBE MIKE 1911	WB8 HBJ ROGER 2947
	WY6 F PETE 2017	KC8 GBM MIKE 3311	WD0 HBW DICK 3380
WB8 DWD JIM 3459	WT7 F TERRY 2542	K9 GC GREG 1578	WD0 HCO BIZ 1929
VE7 DWG DAVE 3197	AD4 FA BILL 2012	W1 GCA DAVE 2610	N2 HCU MIKE 1735
WA8 DXB JIM 2160	W1 FA FRANK 2036	KA7 GCB JOE 1956	K2 HD ED 2790
W4 DXB REED 2746	W3 FAF JOHN 2590	KC8 GCD JOHN 3146	KB2 HDJ RAY 2901
W3 DXK HARRY 2710	VE3 FAL FRED 2337	KF6 GCZ HAP 3463	KB7 HDP PAUL 3191
WN4 DXL LARRY 3345	WA0 FAX ALAN 2192	N4 GD GERALD 1019	KG9 HE JOHN 2501
KC4 DY GORDON 1588	W2 FB HOWARD 1024	KK7 GE ERIN 3218	WB2 HEK BART 3348
KE1 DY SAM 2689	W4 FBE ROYCE 3279	VE4 GEC GLEN 3158	N0 HFF BILL 1239
AA8 DY BILLY 2763	N4 FBY TED 2479	W4 GEK CHET 3351	K4 HFJ PAT 3434
W8 DYF JOE 2024	KA8 FCC DON 3440	N4 GEL BUD 2417	KG2 HG RICK 2718
XE1 DYO JOSE 2410	WB4 FCO ED 3190	AC5 GG LEE 2509	N8 HG HANK 3016
K6 DZY WB 2515	K7 FD JOHN 2420	W6 GG BOB 2766	K0 HHB TOM 3441
WO8 E IRENE 0656	KA2 FDA GENE 3048	KB0 GGQ AL 3385	KC8 HHH BEN 3390
NS3 E ED 0909	W8 FDV JIM 1959	N4 GHI GERI 2448	KE4 HIA BRIAN 1795
WU9 E PHIL 1449	N0 FDX DONALD 3403	KA2 GH0 ED 3195	W1 HIJ BILL 3178
KJ8 E ERNIE 3074	WD9 FEP JON 2127	KF9 GI BROCK 2451	AA1 HJ DAVE 1569
AA5 EA WALLY 1969	N8 FF KEN 1225	N8 GI LARRY 2630	W3 HK GEORGE 1420
WA0 EAF GARY 3021	N3 FGT DENNIS 2703	KA2 GJV BRUCE 1017	P43 HK HUBERT 2989
W1 EAK EVERETT 3120	WA0 FGV JIGGS 1286	KF6 GKR TERRY 3104	AC5 HL GUY 2333
N4 EC ED 3435	KG2 FH KENNY 2352	KB9 GKX "RJ" "BOBBI" 3388	N6 HL HARVEY 2912
KC8 ECG HELENE 2990	WB6 FHK AL 2956	KL7 GN GORDON 2144	K4 HL LES 3081
KC8 ECI LUNA 2984	W1 FHP BOB 2943	KT4 GN CHUCK 2558	K1 HLG BILL 3374
WN7 ECL TOM 3274	AC5 FI ED 1499	W7 GO TONY 3354	N3 HLM MIKE 1480
N2 ED ED 2454	N5 FIH BILL 2001	VE2 GOO TONY 0864	KC5 HLO BOB 3474
K2 EF FRANK 2583	WA9 FJZ GENE 2388	NP2 GP GREG 1292	K5 HLR JOE 1962
K7 EF GEORGE 3189	KB1 FK AL 0916	W4 GP MARK 2941	WB5 HLR DOUG 2100
AA3 EG LEN 2401	KE4 FKX BOB 2646	KC4 GPJ MOOSE 2652	W5 HNS HENRY 3010
N3 EG EARL 2565	KE3 FL PHIL 3117	AL7 GQ GENO 1984	AA1 HO ARTHUR 1283
KI0 EG PETER 2735	W2 FLN GEORGE 2049	N0 GQR STAN 2467	AA3 HO ARNOLD 2661
KA8 EGS RICK 2715	K8 FLY BILL 3032	KB9 GQX NORMAN 2538	N5 HOG JIM 2436
AC5 EH DWAIN 3129	KI0 FM GENE 2349	AC6 GR JAY 2097	N1 HOG BOB 3142
KQ6 EH PAUL 3429	VE3 FMC RICK 2767	W6 GRF GEORGE 1783	N7 HOK RON 3237
K8 EHE TERRY 3152	AC4 FN DAVE 1021	N8 GRM KEN 2688	KE4 HOS RAY 2028
KF9 EI WOODY 3040	K8 FN BOB 2455	K8 GRN HERB 3336	KI0 HQ ED 3427
N7 EIF GENE 3280	K5 FO CHUCK 1716	W7 GS GLENN 2976	KC8 HRO FISTS CW CLUB 3400

FISTS CW CLUB

Membership Roster 7/2/97

OF MICHIGAN			W7 JAT	VERN	1002	KA2 KDJ	GARY	1792	AB7 LK	GARY	1596
KB5 HRS	PETE	1206	KB2 JAX	LYLE	2936	KB8 KEJ	CHER	1511	VA3 LK	LARRY	2752
K1 HS	PHIL	3317	K5 JAZ	JIM	2058	VA3 KEW	KEN	1924	W5 LKL	B.W.	2335
N7 HSD	ART	1269	KA9 JBD	MIKE	2404	AA1 KF	JOE	1734	N3 LKS	GEORGE	1235
W3 HSN	FRED	2317	N4 JBW	MITCH	3206	KK4 KF	BILL	2390	WH6 LL	CHUCK	2596
K5 HT	GEORGE	1730	WD4 JCB	ROB	3034	K8 KFJ	GARIE	1732	KB0 LLZ	BUDD	2053
K9 HT	DAVE	3389	W4 JCH	JERRY	2412	KB9 KFZ	BUD	2567	AA3 LM	COLIN	1948
KD6 HTV	CHRIS	3055	KG9 JD	JERRY	2176	KB4 KGB	JOYCE	2380	KM4 LM	JIM	2518
W4 HU	JOHN	3166	N5 JD	JACK	3267	KB9 KGI	FRANK	3061	KK5 LM	WES	3469
AA1 HV	ZOEL	1291	N1 JDP	ROD	2052	AA9 KH	JAY	2377	N2 LMC	KIT	2055
KG9 HV	JOHN	1750	VA3 JEF	JEFF	3100	N1 KHM	KENNY	1288	WB2 LMV	GLENN	2724
KK4 HW	JULIUS	1426	N5 JEF	MAC	3411	VE6 KJL	KEN	2167	WP4 LNY	JULIO	2396
VE7 HWR	GERRY	3207	WA0 JEN	RON	3009	N9 KJU	KEN	3329	KG2 LO	ROLAND	2980
K4 HXM	GEORGE	2030	W6 JEP	MARIE	2007	KG9 KK	RAY	3164	KB8 LOI	FRANCIS	2062
WA6 HXM	PETER	2329	KC5 JEV	ERIC 7J1AYH	1441	VE3 KLM	FRANK	3232	KB0 LOK	JEAN	2764
W4 HZD	WILLARD	2673	KC5 JFO	RAND	2679	W6 KN	KEVIN	3089	W2 LOZ	HARRY	2315
KF4 HZH	DAVE	2612	AE4 JG	MIKE	2332	AA0 KN	MARY	3183	W7 LPF	JOE	2463
KB2 HZO	FRED	2179	AC5 JH	TOM	2507	N7 KO	RICK	3362	KE6 LPQ	JIM	2429
AE8 I	KEN	1913	W6 JHB	JIM	3159	W3 KOD	HARRY	2935	W8 LQ	CHUCK	1477
KX9 I	ALEX	2569	KS4 JI	GARY	1774	KD5 KP	JIM	3220	K8 LQM	VINCE	2042
NN6 I	WILLIAM	3116	N8 JIM	MARGIE	1231	WB8 KQJ	KEN	1907	KD4 LRP	ROB	3455
AB7 IA	ROBERT	2539	N8 JIW	DON	1515	WA4 KQL	GARY	2534	AA9 LS	JIM	2198
AC5 IA	DOC	3284	N9 JIY	MIKE	1282	KG0 KR	ELIZABETH	1592	KC7 LSN	LORILLE	2014
KK5 IB	DARRYL	2416	WA4 JJH	WYATT	1018	AA3 KR	BRUCE	3308	KC7 LSO	RICH	1990
K7 IB	HARRY	3255	WB4 JJJ	ALAN	2433	KB8 KRD	DON	1752	KB9 LSZ	LEE	2428
K8 IDN	STEVE	2441	WB3 JJK	TOM	3127	W5 KRP	LEO	3080	K3 LT	LARRY	2008
KJ5 IE	TOM	2083	KE6 JJR	MARK	3265	KF4 KRV	ED	2964	W4 LT	GEORGE	3227
KS4 IE	BEN	3087	N5 JKY	MIKE	2626	KF8 KS	STEVE	3141	K3 LU	ULISES(TI5NW)	2555
KB5 IEU	CHARLES	2051	KI7 JL	LARRY	3181	WA8 KSS	RALPH	1417	KA7 LUH	CARL	1932
WB2 IFE	ELAINE	2026	KA0 JLF	DON	1979	AB7 KT	KEN	1755	N8 LUX	PAUL	3020
KA4 IFF	ESTHER	0011	WD8 JLI	JEFF	3268	WB6 KUG	BERNIE	3037	W8 LUY	HACK	2999
K8 IG	RICH	3306	KG2 JM	JERRY	1904	KF4 KUO	STEVE	3275	KF4 LVE	KEITH	2722
KI4 IH	FRANK	1938	W8 JMA	JOHN	3454	WL7 KV	GARY	2338	W4 LVP	BILL	3247
K9 IH	WARREN	3408	KB6 JMJ	TOM	2921	K5 KV	BENNY	2397	K0 LWV	LARRY	2589
N0 IHM	WES	2952	KD8 JN	RANDY	2543	N4 KVA	HORACE	2408	AA3 LX	BRUCE	2525
KA1 IIQ	STAN	1974	WD8 JOH	JOHN	2749	KB9 KWL	JOHN	3340	W2 LYH	BOB	2758
W8 IIS	LARRY	1777	WD8 JOL	PARKER	3043	WD4 KWW	JOHN	2375	KB9 LYM	JACKIE	3444
KC5 IIX	HOWARD	2700	K8 JPM	BOB	2997	KB7 KX	GAVIN	2382	K8 LYR	JOHN	2312
KC6 IJE	"TM"	3357	WA8 JPR	BILL	3215	N7 KX	BOB	3046	NT1 M	ARTHUR	1222
N3 IJR	KARL	1013	N6 JRL	DON	2470	KE4 KX	JIM	3241	KJ8 M	RODGER	1464
AA1 IK	ERNIE	2644	KF4 JRO	BOB	3079	W1 KX	BILL	3437	NU1 M	DAN	1722
VE3 IKS	PAUL	3334	N4 JS	JOHN	2781	VE3 KXJ	BILL	2116	WX7 M	PATRICK	2493
N8 ILN	DENNIS	3233	N8 JSK	SCOTT	2561	K4 KYO	TONY	2378	KC0 M	LARRY	2528
WB2 IMO	JORDY	2497	KE4 JSL	JACK	2754	WX3 L	MIKE	1256	KS0 M	DICK	3067
VE3 INB	GEORGE	2000	N8 JTE	DEL	2426	WA2 L	ANDREW	1262	NJ1 M	DICK	3282
N3 INT	BILL	2659	KB0 JTS	BILL	1586	AI9 L	JESSE	1772	W4 MA	BILL	2623
W8 IO	BOB	2692	W4 JTV	BERT	1999	AE2 L	JOSH	1912	KC7 MAX	DARRYL	2442
AA0 IQ	CLAUDE	1211	AC5 JU	JIM	3431	WO8 L	RICK	2188	N9 MCQ	MARK	1579
K9 IQ	JOHN	2524	AA3 JV	CRAIG	1573	WS0 L	JESS	2928	AA3 MD	CRAIG	2391
N4 IQ	BILL	2572	K8 JV	JIM	2372	NN3 L	ROBIN	3414	KC5 MDD	JOHN	1957
KA0 IQT	JIM	1241	K0 JW	STEVE	3344	KJ7 LB	PAUL	2453	K8 ME	DWAINE	1466
W4 IRE	JOHN	1906	K9 JWI	CLYDE	3051	N3 LBC	JOE	1558	N3 MEE	DALE	1425
KB9 ISR	WAYNE	2761	N5 JWL	DICK	2510	N9 LEC	JIM	3063	K8 MEG	RICH	1790
KG0 IT	BILL	3341	K8 JWR	DAN	3375	W6 LEE	LEE	0739	K4 MF	GARY	2580
N3 ITF	ALAN	1038	K9 JXW	JIM	2325	W3 LEN	LEN	1043	LU3 MFE	EURIQUE	3106
KE4 ITN	TOM	3433	WB6 JXY	TED	3209	K8 LEN	PATRICK	1494	N1 MFR	GARY	1299
N1 ITW	DICK	1492	K2 JY	STEVE	3432	KE8 LF	LARRY	2606	N8 Mfy	HAL	2473
W4 IUI	MERT	1793	KB9 JYN	W.INDIANA D. EXPERIMENTERS	2955	N5 LF	ALAN	3027	N8 MG	MARTY	1760
K2 IVG	GEORGE	3024	KK5 JZ	LOWELL	3299	KB8 LFA	JEREMY	3065	AE4 MG	BARBARA	2018
N8 IX	RIC	2005	K6 JZD	LOU	2962	W8 LFFJ	KERM	1794	KJ5 MG	DONALD	2060
AE4 IX	RICK	2499	NN9 K	PETE	2047	KB9 LFR	BOB	2464	N3 MGS	DICK	2101
KD2 IX	FRANK	3335	NS7 K	RICH	3175	AB4 LG	RICHARD	2459	AB7 MH	DAVID	2498
KA5 IXR	DAVE	2687	AA1 KC	LON	2022	N9 LGP	DAVE	1050	VP2 MH	LAWTON	2554
KB9 IXT	KEN	3196	KT4 KC	RICK	2458	W8 LHG	RALPH	0794	N8 MHV	CONRAD	1295
N1 IYH	JIM	2729	W7 KCJ	ANDY	2527	KE4 LIA	GERALD	2143	AA8 MI	GENE	0914
KX3 J	BUD	2513	AC4 KD	HARRY	3211	K8 LJG	JOHN	1460	KC1 MI	JOHN	1491
AA1 JA	YUZURU	1543	AA3 KD	CHRIS	3240	WB2 LJG	NATE	2039	W2 MIE	CHRIS	2744
KB9 JAI	DWIGHT	2765	K3 KDC	JIM	3112	KE4 LJS	JAY	2381	WB9 MII	GREG	3347
KF6 JAO	JACQUI	2330				AA2 LK	BRIAN	1042	W7 MIO	ERMON	2085

FISTS CW CLUB

Membership Roster 7/2/97

VE3 MIQ BILL 3025	AA2 NL RICH 3342	KB2 OIC BILL 2902	KE4 PPI PETE 1799
WD4 MIS JOHN 3167	KC5 NLD BRAD 2465	KE6 OIO DORTHEA 3364	KC5 PPO GARY 2924
WA0 MJD DUANE 3156	N8 NLE JIM 1756	WA2 OJN WILL 2468	AA8 PQ NEAL 2389
VE2 MJE MIKE 2156	N8 NLK DAVE 1455	W3 OKN MERLE 1281	N5 PRF JOHN 2704
KA2 MJV CURT 2020	K3 NLT RUSS 3273	N0 OKS MARK 3212	N1 PT DAVID 2560
KF4 MKB BILL 3359	N1 NM AL 2399	AA1 OL BRUCE 1966	WA3 PTY AL 3151
N1 MKE GEORGE 3121	AL7 NM ART 2680	W6 OLD DICK 1521	K7 PU KEN 2354
KC5 MLV JAY 2918	W0 NMB PAUL 2013	W1 OLK RALPH 3466	KD4 PUP JERRY 1946
N6 MLW DAVID 1263	WB4 NNC ALBY 2909	AE4 OM DAVE 0719	N3 PUR MIKE 3131
N6 MM HARVEY 2194	N3 NNH ANDY 1428	KB7 OMU JOHN 2199	KB2 PVC KEITH 3071
KE8 MM FRANK 2992	WA8 NNQ RICH 2686	KF2 ON WILLIAM 1570	N1 PVP MARINO 1770
KB8 MMA YVONNE 3461	KD6 NOF BUD 2321	W0 ONU JIM 2445	KD8 PW CURT 2065
WA7 MMG ART 2322	KB9 NOX DICK 2978	KB8 OOM SAM 1582	KE6 PWJ BILL 3472
KB2 MMO MIKE 3228	W4 NPL PAUL 3399	KB4 OPV JERRY 2974	WA9 PWP PAUL 2153
VE3 MMQ GEORGE (GOTHA) 3030	K8 NQC BILL 2634	N7 OPW EARL 1797	KF4 PYE ED 3353
KB7 MNH JIM 2196	KJ7 NR STEVE 1530	KA8 OQF CHARLIE 1478	K6 PYP SCOTT 2485
N2 MNN STEVE 3150	AA0 NR RICK 1704	KT4 OR RICHARD 2691	K6 PZE DICK 3451
K7 MOA KEY 2456	K4 NR TOM 3458	KC7 ORH JIM 3378	AC4 Q PHIL 3123
W8 MON DON 3140	KC5 NRB JERE 2439	AD4 OS KEN @ W9YB 1787	WN6 Q AL 3134
K0 MP BILL 3073	KJ7 NS PHIL 2602	K10 OS KEVIN 2547	K3 QA RONALD 1504
K4 MR BRAD 3377	N3 NSL TIM 3139	KS4 OT JIMMY 1903	WB7 QBC JOHN 2796
K4 MSG PAUL 2628	WB2 NSN PETER 3201	N4 OT ANDY 2613	W2 QBR DOC 1996
WD4 MSM BARRY 2681	WA3 NSR BOB 3396	K8 OUA PETE 1254	KB5 QBU DON 2750
KB7 MSM DAVE 2725	KE2 NT MICHAEL 1031	KC7 OUC CLEARFIELD SYRACUSE F.L.G.S. 2797	N2 QCE JOHN 3288
KA3 MTJ CLARENCE 3326	W9 NT GURNEE 1955	N3 OUE JOHN 2011	W8 QCU DON 3318
AA1 MU CRIS 1928	AC6 NT ERIC 2621	N9 OUH PAULETTE 2368	KT4 QD JOHN 2732
KF2 MU OTTO 2328	N4 NT MIKE 2657	WA2 OVT ROBERT 1472	W5 QEE AL 1980
AA9 MU MARK 2576	N6 NT BRUCE (DEER) 3325	W6 OW JIM 3003	N3 QEN RICK 1971
N3 MVL STEVE 2357	N9 NTC MIKE 1725	W5 OW BEVERLY 3188	N4 QEX JOHN 2316
W8 MVN ERNEST 1527	KB0 NTD CHAS 3186	K8 OW ARLAN 3333	K4 QFK PETE 2363
N1 MVU KIM 1909	KB8 NTE BILL 1744	WB8 OWN SKIP 2415	KD1 QG BRUCE 1227
N1 MVY GENE 3270	W2 NTS ED 2087	K4 OWN SHERRILL 1701	AB7 QG TERRY 2551
KB7 MVZ JUDY 1973	N5 NU JASON 2545	W6 OWP BART 3372	KC5 QGI JO ANNE 3269
KT4 MX WALT 3339	KC7 NUP KELLY 2432	KJ7 OX BRIAN 1575	KB8 QGV HOMER 2619
KC5 MXH KEVIN 2592	WA6 NUT RICHARD 3115	KA1 OX WAYNE 2489	KB6 QIB WALT 3287
W7 MXQ ROD 3163	KB6 NUY WALTER 2953	N4 OXZ ROGER 2926	K4 QIL HENRY 2137
W9 MYZ AL 2773	N9 NVV LEE 1728	KC5 OZS MARTY 2650	KC5 QIQ KEITH 2946
KB9 MZK DAVE 3406	AC4 NW RICHARD 3108	KB8 OZV ROSE MARY 3315	VE1 QJ MAURICE 3176
NU4 N DAVE 2115	N3 NY JOE 2025	AE4 P ELLIOTT 1788	W5 QJM FRED 3231
NW3 N RICH 2504	WA5 NYG RICH 2607	WK3 P HERMAN 2353	W8 QJT ED 2304
KB1 N JERRY 2582	W4 NZP BILL 0911	WJ4 P RANDY 2361	W6 QJZ TOM 2425
NU3 N CHARLIE 2756	W20 O RICHARD 1526	NI6 P PAUL 3153	W0 QKR LOU 3084
K8 NA TED 1415	AE3 O PACKY 3136	KE6 P MARC 3160	N1 QLF MARGIE 1533
AE4 NA JIMMY 2190	W4 OA MITCH 1467	AG5 P WALTER 3259	KE4 QLH DAVID 3387
AA9 NA LYNN 3349	KE4 OAR CHUCK 3019	WD3 P LARRY 3294	W1 QMK RICHARD 1700
WA2 NAF FRANK 2431	KC5 OBI DALE 2929	K2 PA LUIS 3260	AC6 QO CLAIRE 1992
KE4 NAY JIM 1981	VE2 OBK BOB 1481	N3 PAB HANK 2514	KG8 QO BOB 2111
WB4 NBI STEVE 3004	WA2 OCG MICHAEL 3098	KB7 PAD MARION 3102	N3 QOL TERRY 2568
KC7 NBM PAUL 2334	KC4 OCS DON 1224	KB8 PAO HOWARD 3075	N3 QOO JOHN 3184
AF4 NC TOM 1741	WD8 OCV DON 1508	N2 PAX SONIA 3006	KC7 QOP LEE 2977
K5 NC WALDO 3356	KE4 ODE FRED 2309	W4 PBL FRANK 3430	W6 QR BILL 1252
N1 NCY JIM 3252	N0 ODK MIKE 1947	W8 PBO ART 0866	K0 QR RICK 2662
K4 ND PAT 2669	W4 OEL SHEL 3157	WA6 PBY DAN 2949	AE4 QS HARRY 2939
KA7 NDX AL 1784	WB7 OEM CHARLES 2599	AD4 PE JIMMY 2346	W2 QU DAVE 2427
W0 NF PAM 3072	N6 OF DAVE 1214	WB7 PEI BOB 1733	K9 QVB JOHN 1047
K8 NFT BILL 2624	N2 OFG JOE 2481	KC4 PFU JOHN 2187	KB0 QVB RICHARD 1584
W2 NGB CHUCK 3286	KE4 OFN CHARLIE 2678	K2 PG PHIL 2995	KA1 QWJ TED 2490
KB9 NGF MIKE 2585	W4 OGG DAVE 2907	KF2 PH NICK 3199	VE6 QX DWAYNE 3130
N1 NGM NORMAN 1273	N9 OGI STEWART 2308	KC7 PHG TIM 2705	KF2 QY CHET 1278
KE4 NGS DAVID 2373	KE4 OGI ED 2958	KB8 PHO SANDY 3320	N1 QY RON 2968
KC5 NGS JACK 3419	KD4 OGV CHARLES 1587	KJ5 PJ STEVE 2566	KA5 QYR JOHN 2488
W4 NJK CHARLES 0908	W4 OGZ LARRY 3254	AA8 PJ JEFF 3401	KB0 QZ MARTIN 1780
W0 NJZ KEITH 2925	KF4 OH GEORGE 2130	WA2 PJF VITO 3124	KE4 QZB BRIAN 1934
W6 NK RUSS 2906	N8 OHC BILL 1737	WD8 PKI LARRY 2748	N2 QZQ JOE 2636
W5 NK BOB 3208	KB8 OHF TIM 1523	KB2 PLW RANDY 2348	NJ8 R RICHARD 2067
WB5 NKC ARLEY 1986	KC5 OHK DONNA 2611	N3 PM JOE 1268	NY3 R BILL 2452
WB5 NKD PAT 1987	N5 OHQ JOHN 3210	N6 PM GREG 1568	NF7 R DON 2734
W6 NKE KEN 0818	KA3 OHV BILL 2149	KD6 POC ADAM 3366	W10 R TROY 3154
W6 NKR M.H. 3295	KC7 OIA ROB 3193		AH7 R MIKE 3225

FISTS CW CLUB

Membership Roster 7/2/97

WB2 RAR RICH 2126	WA6 SBB GALEN 2394	KB8 TCT BERNIE 1773	W7 UDZ DEL 2064
N8 RAR WAYNE 2716	N8 SBN FRANK 1496	KB0 TCY RICK 3023	KF8 UE AL 1743
N1 RAY CHARLES 1591	KB8 SBW CHUCK 2038	KC1 TD PAT 2620	KT4 UE KEITH 3256
VY2 RB DICK 1410	AA9 SD CHUCK 3376	VE1 TD E. J. 3276	WB2 UEC JOHN 3114
W1 RB BOB 2682	AA9 SE JOHN 2306	N8 TDE JOHN 2313	K7 UF BILL 3122
WA6 RCH JOE 2665	WB8 SEA JACK 3322	W5 TEN WADE 2723	WA5 UFH TIP 2922
W2 RCM RICH 3415	WL7 SF CHAS 2350	KE6 TEN DALE 3200	WA1 UFO HANS 2027
KD4 RCY DAVE 3244	N3 SFA BILL 2651	AB4 TH DEL 2106	KB7 UFS GEORGE 1457
VE5 RD BOB 0907	N1 SG STEVE 1450	KC5 THR JOHN 2795	K8 UGL DICK 2172
N7 RD RD 2714	N1 SGI BILL 2319	N8 TI JOE 1016	N1 UGT DAN 2575
KC5 RDC CHARLIE 3428	N4 SHE DORTHA 2082	KA7 TIF JUNE 2006	KC5 UGX BOB 3337
KD6 RDO GLEN 2788	N0 SHK JIM 3012	VE3 TIJ DAVID 3049	W1 UI JERRY 2675
K4 RDU BOB 1264	N4 SI ROD 2358	N4 TJL JOHN 3297	AD4 UI KAREN 3111
W0 RE JIM 2776	K0 SIA LARRY 2300	W5 TJW BILL 2057	N4 UIQ JOHN 3219
N2 REL BEN 1976	K8 SIA JIM 3323	AB7 TK RANDY 3251	W6 UJX JIM 3002
N2 REM RAY 2342	KC7 SIB MELODY 3093	AA8 TK EVAN 3327	N8 UJZ MIKE 1571
N3 REY JOHN 2937	N1 SIC DON 2557	WB8 TLC CRAIG 3091	KI5 UK HARRY 2182
KC5 RFM ARCHIE 2595	KA2 SJG JACK 3363	KB8 TMR ESTHER 3039	K4 UK STAN 2934
N9 RFR DON 2462	KC7 SJK BRUCE 3250	W8 TMS ART 2184	KB2 UKF JOE 2639
KF8 RG KEN 1556	KE4 SKI JIM 2505	AA5 TN BILL 2519	VE3 UKU TOM 3379
KF2 RG GEORGE 2043	N1 SKM CAROLYN 3261	N2 TNN DEAN 3245	KE4 UKX MIKE 2079
KC5 RGQ PAUL 3155	K4 SL SCOTT 2933	WA4 TNV CLAY 2450	KE4 UKY MATT 2341
KB8 RHG SARA 1418	N2 SLB BOB 2658	AC6 TO STAN 2695	KB2 ULL TOM 2174
KC7 RHM JOE 2717	N3 SLR RICH 2165	KG8 TO DAN 2713	K2 ULZ BRUCE 2076
KG0 RI CHARLIE 1482	AA2 SM BOB 2434	WA4 TOJ MARVIN 3224	KE8 UM MURRAY 1518
AA0 RI CHUCK 2982	AB7 SM JIM 3171	KE4 TOY KEVIN 2461	KJ7 UN LAURA 2785
KA8 RIQ GARY 2359	N1 SNH HENRY 2706	KF2 TP RICK 2191	K1 UNQ CARL 1218
KB7 RJ DWAIN 2040	WA5 SNL GILLY 2791	W8 TP TED 2403	WA5 UNY ALEX 3304
N9 RJ RUSS 2393	WA7 SNY DICK 2553	W1 TP TOM 3312	AA9 UO JIM 3460
AA8 RJ DUANE 2413	K5 SO CARL 2782	W6 TPE ED 2605	VE3 UOL DAVID 1542
AB7 RJ MARSHA 2564	KC5 SOC VICKY 3095	VE3 TQE BOB 3194	VE3 UOL DAVID 1542
W5 RJ ROY 3137	N0 SOT BEN 3086	N0 TR TOM 2387	N8 UOO JOYCE 2633
KF9 RK TONY 1424	KI5 SP KEN 3059	N9 TRK STEVE 1915	W4 UOR FRANK 3338
AB7 RK GARY 2457	N9 SQT ALLAN 3453	N3 TSO CHUCK 2730	KG8 UQ JIM 1705
KC7 RKR DENNIS 3070	KC7 SRL KURT 3352	KO4 TT STEVE 3180	W8 UQ RON 2727
W3 RL RL 2698	K6 SRZ ALAN 2536	N2 TTL JAY 2740	KE6 UQK CHRIS 2355
W3 RMD CHAS 2593	AA9 SS JOHN 1483	N9 TTT SHEILA 2078	KJ7 US PRESTON 3350
W4 RNL LB 2600	K4 SSC GEORGE 3090	KB7 TTY BOB 3418	KE4 USA ERIC 2045
N6 RNP ALAN 3147	N9 SSG DAVE 2365	KF9 TU GREG 1228	KC6 UTA CHARLIE 3226
KB7 RNV FRANK 1950	KC7 SSN ED 3038	KA5 TUF BILL 1430	KA2 UTF GARY 2503
AA8 RO FRANK 2967	KT4 ST ARNIE 2940	KB8 TVZ BOB 2384	VA3 UU JACK 2517
N4 ROA DAN 3407	KA1 STU BEN 2113	N8 TW TED 3386	AA8 UU JOHN 3343
W8 ROG KEN 0924	KB2 SUE JOHN 1967	W4 TWB RAY 1487	KC4 UUG DON 0910
K5 ROV JIM 3266	N3 SUS ED 2395	K4 TWJ DAVE 1435	N9 UUI BOB 2402
VA3 RP ROD 2684	K4 SV LIN 1940	KB2 TWK GEORGE 2331	KS4 UV ED 1769
KA9 RPR PAUL 1485	N2 SV STEVE 2104	WA2 TWS ROY 2903	N3 UVR CHRIS 2347
KB0 RQN CHERYL 2092	KB7 SVA DAVE 1549	KB0 TWZ KEN 2476	W9 UW RON 3412
AA1 RR PAUL 3446	KB7 SVB LEON 2771	N7 TX STEVE 3467	N3 UWZ RICH 2957
KA3 RRB RONALD 2533	N9 SW GENE 1202	K4 TXJ JIM 1448	WA1 UWZ RON 3099
N3 RSD FRANK 2411	KB2 SWI CHUCK 1964	K1 TXU SKIP 1958	K8 UX DAVE 2648
WA0 RSX CARSON 1939	K2 SWZ BERNIE 0748	AB5 TY LEA 1563	KC7 UXA STEVE 3398
W8 RTN LEE 3125	KE8 SX PAT 1927	KD3 TY DON 2344	KA3 UXU LARRY 3475
N3 RTR ROB 2930	KA9 SXH TERRY 2616	KA0 TYB BOB 2141	KG8 UY MIKE 2721
N0 RTU MIKE 2305	KF8 SY ED 1720	KC5 TYC JACK 3246	KF8 UY BOB 3319
KO6 RU CLAUDE 2150	AA9 SY BOB 2157	W5 TYL DAVE 2603	N4 UY JAKE 3450
W5 RUK GEORGE 2440	W3 SYR BOB 3058	KE4 TZA FRANK 1945	KE4 UYS BERT 2386
N6 RUO STEVE 2923	K7 SZ RICH 2793	W3 TZW ROY 3205	KD6 UZJ DAVE 2033
AA8 RV MIKE 1046	K1 SZK FRED 1020	WG3 U JOHN 1500	KB2 UZY BRYAN 2356
KA1 RVV TOM 2169	WP2 T MAGGIE 1287	WZ8 U LOREN 1712	WE6 V JIM 0865
W6 RVY RALPH 3149	WZ2 T RICK 2753	W13 U HENRY 2708	NY2 V FRED 1293
W2 RWH CARL 3409	NV1 T GERRY 2777	NZ2 U JIM 2778	KB7 V PAUL 2003
AE4 RX AL 2712	NB2 T LOU 2944	KF4 UA JIM 3007	NK8 V BOB 2302
AA1 RX NEL 3135	WR4 T THEODORE 3416	KJ5 UA EL 3229	KB5 V JIM 3113
KD4 RXO KEITH 2073	N9 TA FRED 2301	KC4 UBC BILL 3083	KS5 V ED 3283
WX4 S ED 1516	KB6 TAL JIM 2655	W1 UBG BOB 3361	AC9 V BOB 3331
KF8 S STEW 2683	N1 TAT DAN 3173	K8 UCL CORB 2642	KF9 VA STEVE 1952
KC5 SAM VIRGINIA 2911	KE4 TBC TERRY 2303	WA8 UCS CHUCK 3355	WN3 VAW RON 2981
K2 SB STEVE 1462	KN6 TC JIM 2086	KB0 UDM DAVID 2327	KB6 VBL JOHN 3057
K9 SB TIM 3223	KB2 TCR RICK 3405	N8 UDO ALAN 3332	N5 VC VIC 2311

FISTS CW CLUB

Membership Roster 7/2/97

W4 VC HAL 2370	N9 WC GREG 1717	KD1 XA JON 2089	KT4 YY ROGER 2418
KB0 VCC DALE 3172	W8 WC BILL 2371	KJ5 XC BUD 3309	AA8 YY CARL 2500
K3 VE STEVE 3383	N2 WCR JOHN 1461	N5 XE CARL 2520	AA0 YY MARK 2948
N4 VEF DICK 1215	KE4 WCW MARTY 2019	KJ5 XF TONY 2102	N9 YYM MIKE 2511
N1 VEG ARTHUR 2546	KK6 WD JIM 0751	AA0 XI MARSHALL 1791	WA7 YYY COWLITZ 1900
AA0 VF BOB 3473	K1 WD WILLIAM/GOVZG 1522	AA0 XJ JAMES 1978	FISTS A.R.C.
WB4 VFN RICHARD 1458	N8 WDH CHUCK 1258	N2 XJ CARL 3271	AF5 Z BOB 2035
AA2 VG PETER 2530	KB8 WDX WALT 2792	N3 XJQ CHIP 2645	KO6 Z HERB 2343
VE3 VGK EARL 2535	KP4 WE RUBEN 2615	KS4 XN JOHN 1965	NR2 Z MARTY 3015
KC5 VGQ STEPHANIE 3445	AA5 WE BOB 2660	N7 XN DALE 3373	VE6 ZAA JOHN 2950
KE3 VH RALPH 2486	W1 WEA ED 3011	N7 XNH FRED 2799	VE1 ZAC JEFF 2048
KQ4 VH CARL 2552	WA3 WEE RON 2324	AB5 XP MIKE 1910	K6 ZAN RALPH 1529
KK5 VI WILBUR 2063	K7 WF STU 1493	W8 XP GREG 1977	VE3 ZBB BETTY 1265
KA7 VIA BERYL/VE6VIA 1005	N2 WF BILL 2016	KD9 XP ED 2915	W4 ZC JACK 2379
VE6 VIA BERYL/KA7VIA 1005	KG8 WF VINCE 2460	AA7 XQ HOWIE 3103	K9 ZCH LARRY 1474
KC4 VIA DAVE 2970	W8 WFB LEE 2326	N3 XT TOM 2627	KD4 ZD LARRY 2694
K4 VIZ TOM 2423	W1 WFZ TED 2366	N3 XUJ KELLI 2966	KA8 ZDL CLARK 1766
KB3 VJF RANDY 2374	AA2 WG DIANE 1237	N2 XWA LAURIE 3305	W5 ZDW LEE 3285
KC5 VJU JIM 2920	KF9 WG TOM 2318	W3 XX "THE SUB" 1443	KB0 ZE AUBREY 1289
K9 VKY BRIAN 1212	AC4 WH BILL 1729	KN6 XY PATSY 3162	WB8 ZED FOREST 3018
KC5 VLF NATHAN 3041	WL7 WH BOB 3420	N5 XZ ALLEN 2635	AC4 ZH DUANE 1709
WA2 VLV CHUCK 2693	KK5 WH DOUG 3449	N0 XZB CRIS 2183	N4 ZH TERRY 3397
AA8 VM CAL 2472	WA5 WHN JAY 3044	WA5 Y RUSS 1721	N2 ZHF RANDY 2151
N4 VM NORM 2770	AC4 WI LOUIS 1595	KC3 Y BUCK 3369	WB5 ZJN SAM 1989
KD6 VMY ERNIE 3476	K4 WK WAYNE 2775	NM8 Y TIM 3404	KG8 ZK CHARLES 2383
K4 VNQ JIM 2913	N9 WKE BRUCE 2345	VE3 YAG RICK 2422	KB6 ZKB DAVE 3022
KE4 VOQ NICK 3045	N1 WL WES 2697	W9 YB CLUB STATION 1787	K6 ZLL JERRY 3291
KR4 VQ CARL 1274	N1 WLC MIKE 3234	(SEE AD40S)	N4 ZMP ORIN 3082
W8 VQ LEN 2134	KE4 WLP KERRY 2927	KC5 YBA KEITH 3096	KK5 ZN MARK 2563
K5 VQN GREER 2502	W0 WM PERCY 3216	N6 YD PETER 2762	N0 ZNC MAX 2549
KB2 VQR BARRY 2774	N1 WMB DAVE 2522	AC6 YD PATRICK 3468	N9 ZNF JERRY 1775
W8 VQV BEN 2677	KA3 WMJ KEN 1524	KA2 YDT JACK 1261	W8 ZNH BILL 1023
WA2 VQV RUSS 3179	KD6 WNM CAL 2632	N2 YDU JOHN 2696	KB7 ZO BOB 2478
KB2 VQW KEN 3110	W6 WOW PAUL 3198	K2 YEW NORMAN 2654	N8 ZP DAN 1276
W3 VQY SKIP 3031	K2 WP BILL 2608	N5 YFC WAYNE 2550	W2 ZPL JOHN 2419
WA0 VQY ROBIN 3346	AA8 WP LARRY 3384	KA4 YIV BOB 3161	KG8 ZQ JERRY 3053
AA8 VS CHUCK 1434	N8 WPX JOHN 3062	N3 YIW LOIS 3029	KA1 ZQR DICK 1429
WA2 VSL DON 1993	AC6 WQ ROB 3462	N8 YJB EVERETT 1968	AA0 ZR JANE 2496
K2 VT RANDY 2080	KB2 WQZ BOB 2969	K1 YJK BOB 2625	KJ5 ZR TERRY 2584
KJ6 VT USS PAMANITO 3077	KF8 WR TED 1779	W3 YK ART 1998	K7 ZR JACK 2656
SUB. (RDPF)	K6 WS EARLE 2466	AA2 YK ERNIE 2751	W4 ZR JIM 3013
AE4 VT GARLAND 3203	AB6 WS GINGER 2736	N2 YKH BILL 1577	N8 ZRV THERESA 2618
KB5 VTB LANNY 1970	WA3 WSJ ED 1715	K4 YKI NORM 2166	AB5 ZS SUE 3174
KB2 VTN ELMAR 2112	N9 WSK STEVE 2588	AA8 YL GARY 2155	KB2 ZSF MICHAEL 2945
N3 VVE MAGGIE 3424	W2 WSS PETE 1279	N1 YLA BOB 3068	KB8 ZVD WALT 2369
W7 VVW DEAN 3133	N3 WST BILL 3028	KB0 YMH ANDREW 2789	WB8 ZWW WAYNE 1243
KB8 VVX JON 2494	K5 WTA BILL 1594	WA2 YMW BILL 2738	N8 ZXB JOHN 2562
KJ5 VW GARY 3192	KB7 WTC GEORGE 1951	W8 YNY WILLIE 3392	KA2 ZXX BOB 2742
N1 VWD BRAD 2446	KC5 WUM BETTY 3258	AA8 YO BOB 3056	KI7 ZY PHIL 1949
KS4 VX ROGER 2041	KC5 WUS JIM 3439	WB2 YOP STELLA 2597	KA1 ZYH DAN 2529
KR4 VY KEITH 2405	N4 WUW CHUCK 2622	AB6 YP VERN 1731	W4 ZYT DON 3381
KC5 VYE RICH 3050	KB0 WVO TOM 3001	WA6 YPE BILL 2096	K7 ZYV CARL 3426
N3 VYW MARY 2090	N1 WWI CHRIS 1758	WA2 YPL DEE 1997	KB8 ZYY RAY 2046
K7 VZ HARVEY 1943	K3 WWP JOHN 2002	N9 YPN ANTHONY 2471	N9 ZZD ROGER 2054
AA7 VZ ROBERT 3182	K7 WX WARREN 1475	N3 YPW FLOYD 3281	KB8 ZZQ ROB 1995
W4 VZB STAN 3307	KB2 WXH LOU 2699	N2 YQJ ERNIE 1759	N4 ZZZ GEORGE 2666
KC4 VZK MATT 2339	K8 WXQ AL 3213	KK5 YR ALVA 2594	
KC4 VZK MATT 2339	KA7 WXY WALLY 1941	KB8 YRB JOE 1914	
W9 VZR CHUCK 3358	N8 WYO AL 2719	KR4 YS JEFF 2914	
WZ0 W SLEET 1284	WB8 WYU JESSIE 2733	N0 YSE HANK 2670	
AC8 W STAN 1454	K4 WZ RON 2109	WA7 YSU ERIC 2506	
KP3 W JOSE 1706	AA0 WZ BOB 2685	K4 YTB DEACON 1935	
AE4 W GUNNAR 2068	ND9 X FRANK 1012	K5 YU HARV 3253	
WF6 W BILL 3148	NV1 X BOB 1535	KI4 YV BOB 2647	
KB9 W DAN 3262	NW8 X RICH 1540	KO4 YV GEO 2667	
WG8 W ROD 3303	KR7 X HANK 1933	AA0 YX DENIS 2021	
KZ5 W BRAD 3413	AD5 X PHIL 2905	N2 YXC GEORGE 2351	
N1 WC WES 1509	KN2 X BILL 2951	N1 YXU LAURIE 3382	
AA6 WC JOE 1532	NU5 X JIM 2988	N2 YY JERRY 1589	

UK-EUROPE-ASIA VK, ZL, JA, AFRICA

73J AAL NICK 2814	DL8 ABH WOLF 1364
ZU1 ABV JOAN 1696	YO3 AC ANDY 2287
2WO ACD PHIL 1187	G0 AEC ESDE 0878
3Z6 AEF WALD 2837	LZ1 AF DIMITER 0416
PA3 AFF PIET 0445	

FISTS CW CLUB

Membership Roster 7/2/97

M0 AFJ	TIM	2824	G4 BJM	FRASER	0044	G0 DRT	PETER	0652	G4 GOI	JACK	1100
M0 AGL	JIM	2857	JP1 BJR	HAL	0325	G3 DUH	CUJRLY	1156	F6 GPA	HUGUES	2249
M0 AGO	HARRY	2843	G4 BLI	ALAN	1637	TF3 DX	VILLI	1658	G0 GPM	JOHN	0412
2EO AGQ	BRIAN	0990	DA2 BM	BARRY (W1BJ)	2701	G0 DXB	BILL	0132	G3 GPZ	PETE	0613
UA3 AGW	DIMA	0729	G5 BM	FRANK	2784	G4 DYG	PETE	1182	GW0 GQC	BRIAN	0671
G0 AHJ	DEREK	0117	G0 BNS	DICK	0532	G2 DZF	JIM	0422	G0 GSQ	GEO	0266
G3 AHS	DAWSON	0265	G4 BNU	PAUL	2854	PA3 EBA	JAN	0827	GW0 GSW	VICTOR	0042
2EO AIZ	TOM	1692	GW0 BOJ	HOWARD	0689	G4 EBK	GEORGE	0804	G0 GTN	JOHN	0638
9A2 AJ	TOM	2220	GB2 BP	MUSEUM	1890	G0 EBW	DAVID	0421	G4 GUA	JOHN	0467
2EO AJE	PAUL	1845	G0 BQV	MARY	0040	G3 ECS	KEN	1335	G3 GUR	JOHN	1819
ZS6 AJS	JOOP	2871	G3 BRR	JIM	1063	GW0 EDC	BRIAN	0151	G4 GUW	GORDON	0857
SV2 AJX	PACO	0771	ZF8 BS	BRUCE (N6NT)	3325	G0 EEJ	ALICE	0710	GW0 GUY	ELWYN	1685
M0 AKA	GORDON	2832	G3 BSK	MAX	1666	G4 EEM	BOB	0724	G0 GVC	PETER	1096
G2 AKK	BILL	0002	EI9 BT	DERMOT	0015	2W1 EEO	DENIS	1889	G0 GWD	ALAN	0817
M0 AKN	GORDON	2870	GM0 BUH	ALEX	0076	DK8 EF	FRANZ	1837	DL2 GWL	ULF	2284
MM0 AKW	NEVILLE	2281	G0 BUR	ROY	0523	G4 EIB	JIM	0372	DF3 GX	KLAUS	0600
ZS6 AL	VIDI	1699	G4 BUS	REG	1834	G0 ELH	BOB	1397	G3 GXQ	WALTER	0947
M0 ALD	JOHN	2808	G0 BWG	JOHN	0238	DF4 EO	DIDI	0737	G4 GYD	MIKE	1352
G0 ALH	STAN	1671	G4 BWJ	BARRIE	1378	S53 EO	MIL	1098	G0 GYY	PETER	1601
2EO ALN	DAVE	1858	LA3 BX	TED	2820	GM0 ERV	SHIRLEY	0107	G0 GZK	LAURIE	0554
M0 ALO	DON	2839	G0 BXV	DAVE	0261	G4 ETJ	REG	1394	G0 HAU	TED	0277
2EO ALQ	PETER	2283	LY3 BY	VILMAS	1811	G0 EUD	CHARLIE	0067	G3 HBN	JIMMY	1199
2M0 ALU	JIM	1844	G0 BYG	JIM	0089	G0 EVV	DAVID	0550	OK2 HBR	ZDNEK	2812
2W0 AMB	JOHN	2217	G3 BYX	DES	0581	G4 EYY	ROY	2826	GW0 HCB	PAUL	0528
2EO AMK	DERRICK	1860	DL3 BZZ	LUTZ	1640	2W1 FAA	JENNY	2236	GI3 HCP	DES	1311
G3 AMO	JOHN	2848	GI4 CBG	ROY	0161	G4 FAI	TONY	0029	G0 HDE	CHAS	0845
UA0 AMW	GEORGE	0836	ON4 CBK	MARTIN	2858	EI2 FB	LIAM	1197	G0 HDI	BRIAN	0620
ON4 ANE	BERT	0435	G0 CEK	FRED	0334	G0 FBY	ROD	2273	G3 HEL	JACK	1663
M0 ANI	VIC	2291	3B8 CF	JACKIE	0951	DL8 FCO	WERNER	1183	GM3 HEN	TONY	0122
2EO ANO	ALAN	2269	G0 CGT	BRIAN	0702	G0 FDJ	KEITH	1348	G0 HFI	GORDON	0609
M0 ANQ	JIM	2842	G0 CHV	MIKE	0090	UB5 FDM	JERRY	0832	G0 HGA	ANGIE	0041
G0 ANY	DARYL	2270	G0 CIJ	MIKE	0663	DL4 FDM	FRITZ	2225	G0 HGG	GORDON	0930
ZL2 AOH	RALPH	1073	G4 CMY	TONY	1626	F6 FEQ	RENE	1670	G0 HHL	PHIL	0429
G0 AOL	GILL	0280	SV1 COX	PANOS	1809	G2 FFD	DAN	1149	G0 HIN	TOM	0069
2EO AOR	MARK	2250	2E1 COY	JOHN	1833	I7 FFE	FRANZ	2280	G0 HIS	DAVE	1071
2EO AOZ	IAN	2841	G4 CPA	GEOFF	1644	I2 FGT	JUL	1051	EI5 HJ	GERRY	1079
EA1 APA	FRAN	2818	2E1 CQL	RAYMOND	2873	G0 FGW	RON	0433	G0 HJX	PETER	0819
M0 APC	MICHAEL	2838	PA3 CQR	FOLKERT	2850	G0 FIP	ELLA	0215	GI0 HKS	BILL	1876
M0 APY	RICHARD	2804	GI4 CRQ	KEN	1064	UT9 FJ	SAM	0618	G2 HKU	TED	0841
G3 AQF	HARRY	2869	G3 CSC	SAM	0339	G4 FJC	RICHARD	0988	G0 HLG	GORDON	0488
UA4 AQO	SERGE	1180	2E1 CSR	GEOFF	1830	G4 FMH	BILL	0996	GM0 HLP	IAIN	0535
SP7 AQR	STAN	1321	G1 CUV	JOHN	1664	G0 FOD	NEV	0308	GI3 HNM	CLIFF	1379
M0 ARM	LES	2822	G0 CVH	VINCE	0048	G0 FPV	IAN	0946	LA3 HO	MIKE	2821
PA3 ASC	MIKE	2260	EW6 CW	VAL	1338	G3 FPY	ERIC	1331	ZS6 HR	REON	1697
G3 ASG	RAY	2272	EI0 CZ	BREN	0632	G0 FRL	BOB	0390	G0 HRL	GERALD	0975
M0 ASU	KARL	2827	F6 CZC	LEONCE	1371	G3 FTU	ROY	0502	EI6 HS	PAUL	1313
DL7 ATL	MANFRED	0418	G3 DAC	ALAN	0024	RB5 FU	GENE	0792	G4 HSC	HARRY	1192
G0 ATR	MIKE	1854	G0 DAF	JIM	0795	G0 FUS	PAUL	0110	G3 HSP	ALEC	2218
G0 ATS	ELAINE	0331	G4 DAL	DAVE	0075	G0 FVS	JIM	0628	IK2 HSW	HENRY	1388
MW0 AUH	JACK	2802	G0 DBU	ERIC	1310	EA3 FWE	JORDI	1846	G0 HTX	TONY	0139
G3 AVL	BOB	0931	G0 DCM	ARTHUR	0288	GD3 FXN	ART	0127	GM3 HVT	JIM	1628
M0 AWB	TONY	2805	G3 DCO	BRIAN	2856	EI5 FY	BILL	0846	G0 HXU	SIMON	0010
G1 AWJ	JOHN	1195	G0 DDI	PHIL	0631	G4 GBG	PAUL	0637	GW0 HYC	BEN	0485
GW0 AWN	HARRY	2221	G0 DEB	DAVE	0380	G4 GBX	WANDA	0514	GM4 HYF	GEORGE	0243
G0 AXE	MIKE	0361	DL6 DGH	ULI	1874	GW4 GCB	PETER	0657	G0 HYT	PATRICK	0220
7J1 AYH	ERIC KC5JEV	1441	G4 DHZ	PETE	0980	G0 GFG	MARK	0113	G3 HZL	DON	0410
ZR6 AYS	GREG	1800	GW0 DIX	RON	0740	G4 GFQ	RON	0894	G0 IAL	ROD	0348
9HI AZ	GAET	1689	G0 DJA	DAVE	1372	GM3 GG	GEORGE	1154	G4 IAV	BOB	1140
G0 AZH	JERRY	2862	GM0 DJI	DANNY	0312	G0 GGE	PETER	0700	G8 IB	DUG	0882
LY3 BA	GEDAS	0984	GM3 DKW	JIM	0639	G0 GGU	STEVE	0491	LA1 IE	OTTO	0249
GM4 BAE	GERRY	0683	G4 DNB	BILL	0058	DL1 GJN	JEURG	0948	G0 IFM	COLIN	0728
ON4 BBA	JEMPI	1849	G4 DNC	GEOFF	0071	G1 GJR	ARTHUR	2271	G0 IFT	PETER	1194
GI4 BBE	REG	1188	G3 DOT	JOHN	0718	G4 GJY	SID	1667	G0 IFX	BRIAN	0471
GD0 BCM	WALTER	0870	G3 DOV	DEREK	0175	G0 GKE	LES	0197	GM0 IGJ	JEFF	1356
ZR6 BDW	BEN	1695	G4 DPH	GRAHAM	2294	G0 GKH	DAVE	0034	G0 IGP	TONY	0129
GI0 BEY	SCOTTY	1184	VK7 DQ	JERRY	0957	DF3 GL	KLAUS	1636	GW4 IGQ	REG	0086
G0 BGI	STAN	0736	ZS5 DR	DON	1802	G3 GM	BEN	1869	EI2 IH	HUGH	2212
PA3 BHK	ROBERT	1377	DL1 DRA	ACI	1077	GM7 GOD	RILEY	0847	G0 IJE	DON	0509
PA3 BJD	BRAM	1848	SM7 DRH	CLEM	0973	G0 GOD	JOHN	1604	G0 ILN	RICHARD	0398

FISTS CW CLUB

Membership Roster 7/2/97

G0 IMF	ALF	0427	ON5 KK	GEERT	1836	G0 MEX	HARRY	2245	G0 ONS	JIM	0741
G3 INA	RON	0097	G0 KKL	PHIL	1859	GM0 MFE	JACK	0603	GW0 ONU	DENNIS	0591
G3 ING	JOHN	1674	G0 KKX	DOUG	0466	G0 MGD	DENNIS	0630	G0 OOD	TIM	1350
G4 INM	TOM	0084	G4 KLF	TONY	1198	G7 MGV	BOB	2867	GX0 OOO	VARIOUS	1000
G0 IOF	GRAHAM	0231	G4 KLQ	EDD	1843	G0 MHE	BRUCE	1677	G4 OOS	JOHN	0812
G0 IOV	GORDON	1147	G0 KLS	RON	1336	G0 MJV	ALBERT	1357	GW0 OPY	DAVID	2852
SW4 IQA	REG	1116	G3 KMG	DAVE	0124	G3 MJX	TONY	1893	G0 ORD	ERIC	0963
G0 IRL	AUDREY	0510	GM0 KMG	BILL	0484	G0 MKJ	KEN	1390	G0 ORS	CHARLES	0852
G4 IRM	DEREK	0123	G0 KMU	JOAN	0786	G0 MLA	ERNIE	0606	G4 OSB	TOM	0579
G3 IRM	PETER	1092	G0 KNJ	BOB	0463	G3 MLD	KEN	1091	G0 OSR	OLIVER	1178
G0 IRO	BRYAN	1823	G0 KPB	TONY	0512	G4 MLW	IAN	0130	G4 OTN	COLIN	0028
SW0 IRP	COLIN	0690	G4 QOM	BOB	2211	GI3 MMF	BILL	1613	G0 OUI	BILL	0888
G0 ISC	RENIE	0610	G3 KQN	JACK	0699	ON6 MN	MARTIN	1826	G0 OVZ	SHAUN	1368
G4 IST	BILL	0991	G0 KRT	ERIC	0133	G0 MOU	DICK	0668	G0 OWS	JIM	0822
G0 ITS	ROY	0498	G3 KTT	ALAN	1308	HA2 MP	JANOS	0899	G4 PCE	RICH	1693
SW4 IUN	RON	2835	G3 KUL	DOUG	0840	G0 MRH	RON	1327	GI0 PCU	DAVID	0831
G3 IVF	SMUDGE	1614	GW4 KUS	BERT	0856	G0 MRM	ERIC	0586	GI4 PCY	FRED	0156
G4 IXI	TREVOR	1141	G3 KVE	KEN	2235	G4 MSR	JEFF	0357	G0 PDM	MIKE	1343
G4 IXL	BOB	0165	G0 KWD	KEITH	0525	DL8 MTG	KLAUS	2200	G0 PEH	TONY	1657
G0 IZU	MIKE	0809	G3 KWO	KEN	0006	G0 MTJ	JOHN	0873	G3 PEN	DAVE	1303
G0 IZW	DEREK	1302	G4 KXG	KEN	0938	G0 MVG	HERBERT	0760	GM0 PIV	DONALD	2847
ZS6 JAN	JAN	1698	G0 KYC	ALAN	0513	G8 MVZ	PAULINE	1160	GW0 PJX	CHRIS	0950
G0 JBP	ROBIN	0205	G0 KZA	ERNIE	0738	G3 MWF	RAY	1151	G4 PKN	BRUCE	2242
G0 JBQ	SIMON	0204	GW0 KZK	BRIAN	2288	G0 MWU	BRIAN	0701	G3 PKX	DON	0257
UA6 JD	VLAD	1385	G4 KZZ	NIGEL	1821	G8 MYI	GEOFF	2274	G7 PMH	RON	1624
G4 JEG	BILL	2254	F5 LAW	YANN	0752	GW0 MYY	JOHN	2853	GW0 PNC	HARRY	1106
SW3 JEZ	BOB	0364	G0 LBT	KEN	1897	G0 MYZ	MARIAN	0636	GW0 PNI	DAVE	1053
G0 JFD	GRAHAM	0477	G4 LGA	DON	0642	G4 MZS	TOM	0150	G0 POJ	JUDY	0883
G4 JHZ	LES	1322	G0 LGF	TERRY	1817	OH2 NAG	PEKKA	2811	G3 PPD	STUART	0977
G0 JIT	DICK	1136	GM3 LGM	BILL	0564	DL2 NAI	ISRAEL	2803	GW0 PPG	SYD	2285
G4 JIZ	JESSE	0179	G4 LHI	PETER	2219	UA4 NAL	KIRIL	0842	G0 PPI	DEREK	1639
G0 JJQ	WAYNE	0851	GW3 LHK	GWYN	1125	G4 NBI	LES	2297	G4 PPK	CLIVE	0244
G4 JKW	ALAN	1132	G0 LHZ	JIM	1155	G3 NCL	RON	0168	G1 PPK	JOE	1375
G0 JLO	CHAS	0622	G7 LIE	BRIAN	1370	G0 NDT	PAUL	0653	G4 PPV	GRAHAM	0134
G0 JLY	ANDY	0358	G4 LIM	GEOFF	1652	G0 NEB	JOHN	0755	G4 PQG	RALPH	0634
G3 JMZ	JOCK	2865	GM0 LIR	PIP	0942	YO4 NF	SIL	1330	G0 PQU	CYRIL	1676
UU4 JN	ALEX	0678	G0 LIU	GEORGE	0816	G4 NIR	DOUG	1121	G0 PRD	PETE	1179
G0 JNR	SHANE	1396	G0 LJB	PAUL	0493	GI6 NIY	EDDIE	1612	GW3 PRL	MARTIN	1315
SP6 JOE	JOE	0764	G4 LJU	COLIN	0099	IN3 NJB	BOB	1317	G4 PSE	MIKE	0837
G0 JOH	NIGEL	2282	G0 LLN	PETER	1871	IK0 NKI	LUIGI	1052	G4 PSI	GEORGE	0032
G0 JON	JOHN	0774	GM0 LOA	JOHN	0121	G0 NKO	KEN	0862	G4 PSL	TERRY	1062
IK7 JPP	WALTER	1349	G0 LOE	STUART	0625	GW0 NLB	SAM	0983	G0 PTB	BRIAN	1072
G3 JPZ	IAN	1347	G0 LPF	RICHARD	0960	G0 NNJ	SID	1386	G4 PTE	KEN	0723
G4 JRE	JOHN	0577	G3 LPS	ERIC	1398	G3 NNK	ALF	2815	GI0 PUZ	IRENE	1656
G0 JRN	ART	0295	G0 LQX	TREVOR	0425	G0 NNO	JOHN	0478	G0 PWZ	PETER	0876
G0 JRT	TOM	0745	G3 LRB	STEVE	1171	G0 NOB	LIONEL	0785	G0 PXI	PHIL	0979
G3 JTO	ERIC	0766	G0 LRE	LARRY	0750	GI3 NQH	JOE	0945	GW4 PXQ	GEORGE	0160
G3 JTS	TOM	1681	G3 LRP	PETER	1672	F5 NQL	MAURICE	1816	GM0 PXV	PETER	1057
F5 JUD	AL	0697	G0 LSH	ALAN	0508	G0 NSU	GEORGE	1606	I7 PXV	VIN	1342
UA6 JW	HARRY	0820	G4 LSI	JOHN	0368	ZS6 NT	DWIGHT	1805	GW0 PZS	TREFOR	0976
G0 JWB	BILL	0385	G0 LSY	JOHN	0196	G7 NTM	JIM	1899	G6 QA	LYNDA	2864
G0 JXS	CLARRY	0506	GW0 LTH	LYNDON	2226	F5 NTP	CLAUDE	2275	DK7 QB	BERT	0362
G3 JXT	TED	1603	G3 LUZ	FRED	0444	G0 NTR	JIM	0264	SP2 QVS	PIOTR	2801
L21 JZ	TONY	1318	G0 LVB	MALCOLM	1175	G0 NUP	KEVIN	0796	G4 RBE	JACK	0174
G4 JZM	CHARLES	1688	G5 LW	ALEC	0682	G0 NVP	PENNY	0704	G0 RCB	TED	1687
G0 JZU	ROSS	0679	G0 LWI	FRANK	0901	G0 Nvy	PETER	1316	G0 RCE	KEITH	1054
DL8 KAZ	DIETER	0593	G7 LWJ	COLIN	2240	TI5 NW	ULISES (K3LU)	2555	UB5 RCH	VICTOR	0936
G0 KCA	JOHN	0200	G3 LWU	DERRICK	1608	G4 NXN	TERRY	1104	G3 RCO	CHARLES	1168
G0 KCJ	ALAN	0602	G0 LYY	JOHN	0696	G0 NYZ	STEVE	0982	G4 RDM	PETER	0186
ZS5 KD	BILL	1801	G0 LZA	DEZ	0833	G0 NZL	JOHN	0773	DJ3 RE	HANS	1894
0Z7 KDJ	KLAUS	2851	G0 LZL	DAVID	0587	G4 NZU	RON	0309	G0 REA	ROMA	0895
G3 KEF	TOM	1839	S51 M	BRUNO	2243	GM3 OAV	DOUG	0562	G0 REB	CHRIS	1164
G4 KEW	BOB	0275	G3 MAM	DAVID	0497	G0 OBU	KEITH	1615	G3 REV	RAY	2216
SW4 KFD	BARRIE	1616	GW0 MAP	BOB	0935	DL3 OCG	FLORIAN	2201	G4 RFS	STAN	0229
G0 KHI	BILL	0706	G0 MCE	BOB	2829	G7 OCV	MARTIN	1648	G3 RGE	KEN	1662
I5 KHx	DANIELE	1885	G3 MCK	GERALD	0230	DF8 OF	SIGI	0949	G4 RGK	DAVE	2238
G0 KHY	JOHN	0487	G0 MCV	SANDRA	0555	G4 OHX	SAM	0455	G0 RGO	MALCOLM	1134
SM7 KJH	CHRIS	0017	ZS6 ME	ERIC	2809	GW3 OKM	JOHN	2268	G0 RGV	RICHARD	0981
G4 KJJ	JOHN	1630	G0 MEG	MEGAN	0518	G0 OKZ	JOHN	0780	G3 RHP	JOHN	1879

FISTS CW CLUB

Membership Roster 7/2/97

G4 RHR KEN 2248	G0 TCF PETER 1340	GW0 UWM JOHN 1810	G7 WIH MIKE 2807
G3 RHU MALC 2810	G4 TCJ DOUG 1346	G0 UXK PAT 1622	G3 WII FRED 0559
G0 RIQ DOUG 2255	G0 TEB CHRIS 1675	G0 UYK JOSEPH 1324	G0 WJO PETER 1846
G3 RJV GEORGE 0428	G3 TFK LES 1641	G0 UYP ROGER 2849	G4 WKG ROB 0079
ZS5 RK ROD 1804	G0 TFV TERY 1177	G0 UYP ROGER 2840	G0 WKJ CHRIS 2239
G0 RKT DAVID 1066	G0 TGF JIM 1621	G0 UZH STEPHEN 1829	G0 WLC BRIAN 2205
ON6 RL GUIDO 1080	G0 TGU BILL 1329	G0 UZQ PETER 1691	G0 WLX ALAN 2208
G0 RLW ALAN 0902	G0 THA PETE 1174	F5 VAO DENNIS 2819	G0 WMC PETER 2279
IK2 RMZ MARTIN 0853	G0 THV JOHN 1374	G0 VAT TONY 1895	G0 WMR RED ROSE GP 1873
G0 ROT MIKE 1056	G0 THX VIC 1634	GW1 VAW BRIAN 0420	G0 WHW DOUG 2813
OK1 RP PETR 2833	G0 TIP GEORGE 0940	G4 VBB GRAHAM 2267	G4 WNA TONY 0598
G4 RQA TOM 0036	G0 TKT PETER 1126	G0 VBH BILL 2252	GW0 WNB SID 1892
ZS5 RR ROSE 1803	G4 TKX ARTHUR 1668	G0 VBT HOWARD 1682	G3 WNI BILL 0413
G0 RRF PETER 2836	G3 TLF FRED 1853	GM0 VCQ JIM 2299	GW0 WNW BOB 2800
G0 RSA JOHN 2244	G0 TMX TERRY 1862	G0 VCW RICHARD 1842	G3 WP JACK 0310
G3 RSF ALAN 1877	G0 TMZQ NORMAN 1653	G0 VCY PHILIP 2277	G3 WPK BOB 1870
G4 RSK GORDON 0030	G0 TNY TONY 1669	G3 VD BERNARD 1617	G0 WPM NICK 1886
G0 RSN RICHARD 0869	GD4 TOW KEITH 0898	DL1 VD KLAUS 2823	VK3 WQ MARLENE 1359
G3 RSP ALAN 1847	G0 TRO NESS 1323	G0 VDI JOHN 1840	GM0 WRR JOHN 2276
G0 RSU GEOFF 1150	G3 TRU HARRY 2233	G3 VDL JOHN 0549	G0 WSL JOHN 2295
G7 RTI KLAUS 1325	G3 TTH TEX 0995	G0 VEB BROOK 0952	ZS1 WT WILF 1694
G10 RTN GERARD 2234	G0 TUA GEORGE (VE3MMQ) 3030	GW0 VFF STEPHEN 1872	ZS1 WT WILF 1694
G0 RVO DAVID 1102	G0 TUE RAYMOND 1191	G0 VFM TONY 1808	OE6 WTD DIETER 1068
G8 RVW STEVE 1850	G0 TUJ WALT 1139	G0 VGF BOB 1684	G4 WTD COLIN 1841
G4 RWP EDI 0286	G3 TUX CHRIS 1307	G0 VGR DAVE 1852	G0 WTO ELAINE 2259
G0 RWQ NIGEL 1619	G3 TVI ROD 0747	G0 VGR PETER 2289	G0 WUY ALEX 2834
GW3 SB CHAS 0345	G0 TWN DAVID 1334	G10 VGV ANDY 1654	G5 WW PAUL 1345
G0 SBH TED 1655	G0 TZV GORDON 1392	G4 VIJ BILL 0807	G4 WWQ DAVE 1056
G0 SDA COLIN 1172	G0 TZW JOHN 1332	GM0 VIT BILL 1665	G3 WWT JOHN 1114
GW4 SDO DAVE 2861	G4 TZZ ANTHEA 2298	GM0 VIY JON 1631	G0 WWT PETER 1891
G0 SED GEORGE 1867	G0 UBE JOHN 0934	HE9 VIZ NICOLA 1659	G0 WYV ALEX 1813
F5 SEE JACK 2237	G4 UCJ SEAN 2860	G0 VJJ STAN 1824	OZ9 WZ KNUD 2246
G0 SEF DAVE 1129	G0 UCK BARRY 1344	G0 VJK MIKE 1647	G0 XAE MIKE 2293
GW0 SFO KAY 1105	G0 UCQ PHIL 1319	G0 VKL ROD 1864	G0 XAH DAVID 2222
G0 SFV DAVE 1161	DL6 UDX WOLF 1181	G8 VL IAIN 0890	G0 XCF COLIN 2296
GW0 SGG BILL 1602	ON5 UE DANNY 1825	G0 VLC ANDREW 2251	G14 XFS LYN 0464
G0 SJC CLIFF 1391	G0 UER CYRIL 2232	GW3 VLU EDDIE 2213	G4 XHE RICHARD 1365
G3 SJE JOHN 0391	G4 UEW DAVE 0584	G0 VLY PHIL 1865	G13 XHL NOEL 1354
G0 SJU SAM 1185	G0 UFF ROY 1382	G0 VLY PHIL 1865	G4 XHZ FRANK 0008
GM3 SKN DENIS 2817	G0 UFT KEV 1650	G0 VMI BRIAN 2257	G4 XJU LAURIE 0153
G0 SKR JOHN 1115	GM4 UGB RICHARD 2830	G4 VMV RAY 0402	G3 XMM TOM 1395
G0 SLJ DENIS 1838	G0 UGZ LEN 1353	G3 VNG DAVE 1097	G4 XOC PETER 1645
GM0 SMT ALLAN 1610	GW0 UHJ BILL 1868	G4 VOJ ART 0007	G4 XPE MIKE 0100
GM4 SMZ DAVID 2256	JA7 UHM MASA 0018	G5 VQ ERIC 1679	GW4 XQH JOHN 0576
G0 SNE ANNE 1123	G4 UHM STEVE 0304	G0 VQA JULIAN 2207	G4 XUZ RAY 0777
G4 SOO HAROLD 0767	GW0 UIP --- 1878	G3 VQO LES 0874	G5 XV RON 0871
G4 SPK ROBERT 1623	G0 UIW TONY 2868	UA3 VRP VICTOR 1110	G4 XVE JOHN 0342
VK2 SPS STEVE 1399	G0 UJD MERV 1680	G6 VS GEORGE 0267	YU1 XW BEN 2241
G0 SQD TOM 2845	G0 UKX RAY 1618	G0 VSS RAY 1812	G4 XWV MAT 1660
G0 SQF JOE 1384	G4 UKZ RAY 0148	G0 VTI TERRY 1807	G13 XZM DES 2806
G14 SRQ GEORGE 0662	G0 ULB DON 1649	G0 VTN RON 1851	G4 YEP TED 0020
G10 SSA KEITH 1304	G4 ULT LES 0675	G3 VUN GLORIA 1620	G4 YFD FRANK 0486
G0 SSG REG 1169	G0 UMN JOHN 1678	G4 VVK BERNARD 0838	G4 YJB RON 0601
G4 SSH ROY 0999	G0 UMT DEN 1861	G4 VXY DAVID 1099	G4 YLB JIM 0492
G0 STE STEVE 1875	G0 UOM NORMAN 1369	G0 VYR NORMAN 2844	G3 YLL RON 0282
G0 STR BILL 1609	G1 UOP JOE 1863	G0 VYX PETER 2214	G3 YLT TOM 0489
G10 STS RONNIE 1661	G0 UPS PAUL 1651	G13 VYY BRIAN 0900	G4 YMB MALCOLM 0681
G0 SVX IAN 2223	G0 UPU ROGER 1643	G0 VZG WILLIAM/K1WD 1522	G4 YNU JOHN 0073
G0 SWT LEN 1642	G0 UQE BERT 1815	G9 VZV DAVE 2286	G3 YRP IAN 2825
G0 SWU PETE 1389	G0 UQP GRANT 1383	G0 WAO PETER 2215	G4 YRS GERRY 1326
GW0 SXE JOHN 1101	G0 URM PETER 1632	G0 WAS ALAN 2828	G3 YSX STEWART 2872
G0 SXG KEITH 1138	GW0 URS FRED 1328	G0 WAU JILL 1690	G3 YXJ DANNY 1305
GW0 SXZ JIM 1339	G0 URX DAVID 1351	G0 WAY BOB 2292	G4 YYW DAVE 1600
G0 SZE CHRISTINE 1301	G10 USC JOHN 1387	G4 WBN TREV 0381	G4 YZO JOHN 2863
BV2 TA TONY 1884	G4 USW BILL 0405	G0 WBT JEAN 2855	G3 ZDD DEREK 1312
G0 TAW IAN 1300	G0 UTL ALAN 1393	VK2 WES WES 2231	HB9 ZE FRANK 2859
G0 TBR BOB 1135	G0 UTR DAVID 1629	G0 WFM PETER 1880	G4 ZFT MARY 1162
G0 TBD TERRY 1163	G0 UUA WARWICK 1683	G3 WGL NOLLY 1633	LA6 ZH RUTH 1314
IK5 TBK STEVE 2247	G4 UUV PETER 0376	G0 WHP JOHN 1898	G4 ZIB TONY 0811

FISTS CW CLUB

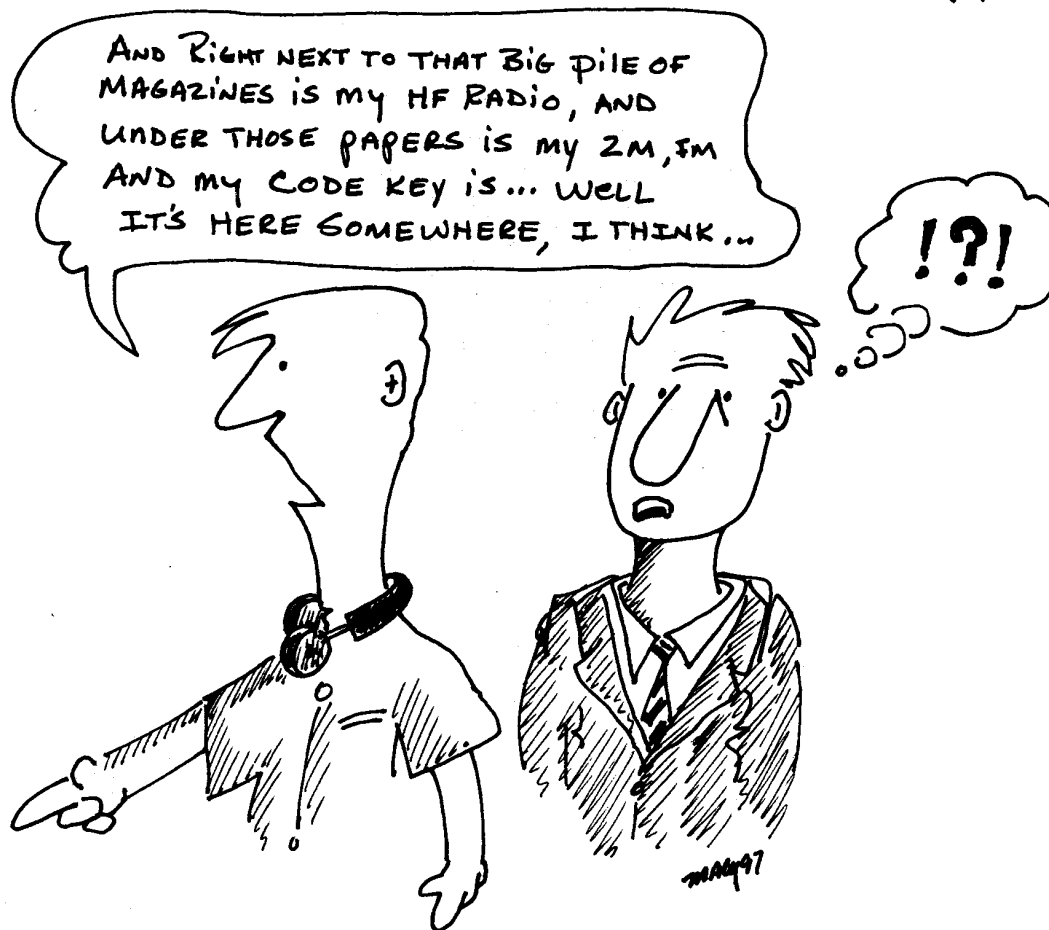
Membership Roster 7/2/97

G3	ZJJ	MIKE	0274
G4	ZLX	KEN	2258
GW3	ZNN	WALLY	0964
G3	ZNR	DEREK	2816
G4	ZPY	GORDON	2278
DL1	ZQ	HANS	0313
G3	ZQS	GEO	0001
G3	ZRZ	IAN	0781
GM4	ZTO	JOHN	0695
G4	ZVL	HENRY	0538
G4	ZVR	TONY	0666
G3	ZWF	JOHN	1896

SWL's, Other Misc.

Brian	SWL	0440
	SWL	1814
	SWL	1818
Di	SWL	1882
Brendan	SWL	2253
Ron	SWL	2290
James	No call	2787
Doug	No call	3035
Linea (YF of VY2RB)		3036

WAZPS World
By Arnie Macy KTUS



RULE NO. 1, IF YOU'RE GONNA SHOW SOMEONE
YOUR SHACK, MAKE SURE IT'S READY TO BE SEEN...

FISTS CW CLUB, P.O. Box 47
Hadley MI 48440-0047

Have you checked your mailing label lately??

Your renewal due date is on the upper right corner of the mailing label.

ADDRESS SERVICE REQUESTED

Bulk Mail
US POSTAGE
PAID
Permit 12
Hadley MI 48440

By Annie Macy KT457
WORLD



THEN THE NCS SENDS
ME OFF FREQUENCY TO
TAKE THE TRAFFIC, WELL
THE OM TELLS ME HE
HAS A BOOK OF 20,000
FOR EACH GRANDCHILD
... I CAN'T FEEL MY
FINGERS ANY MORE!

